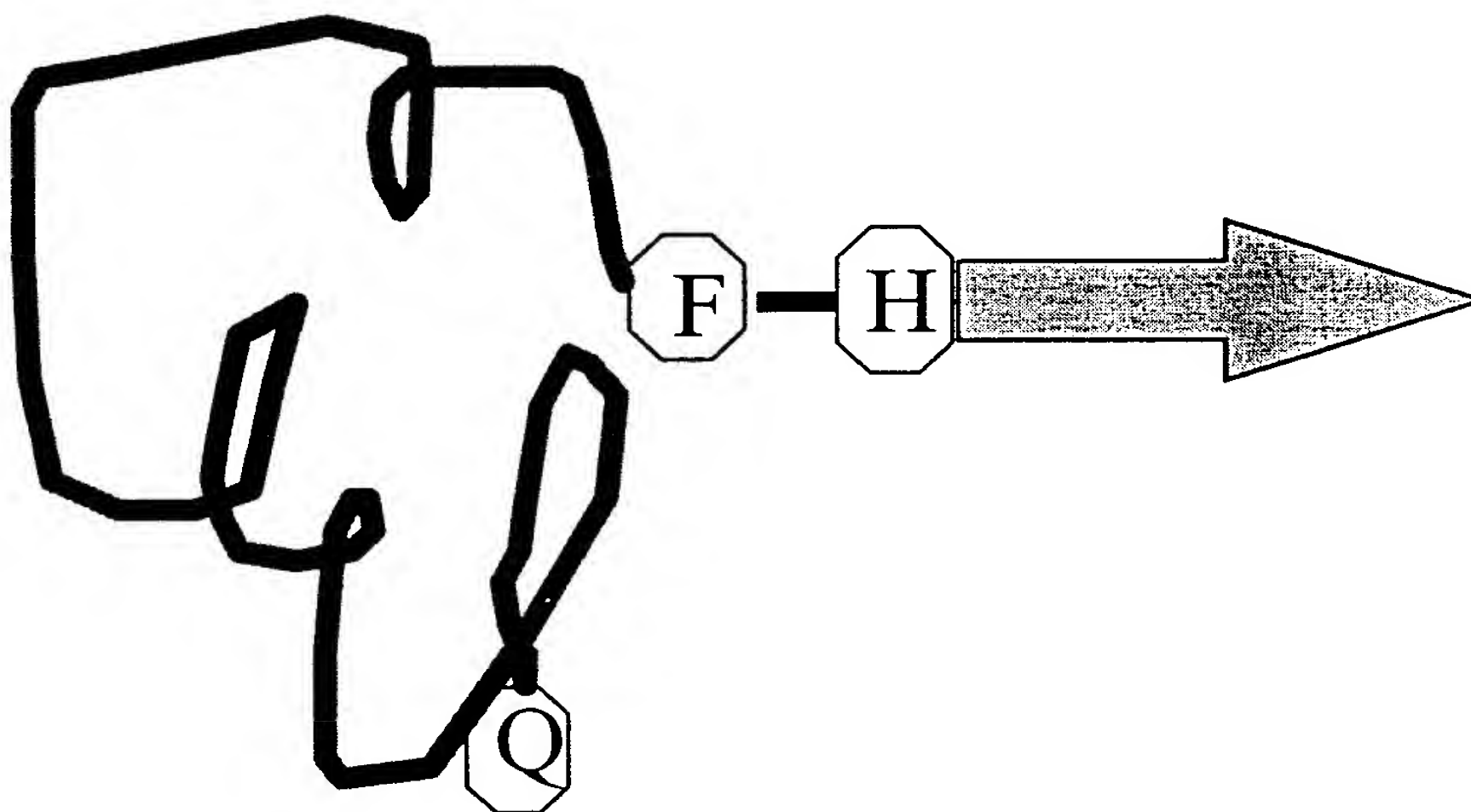


Figure 1



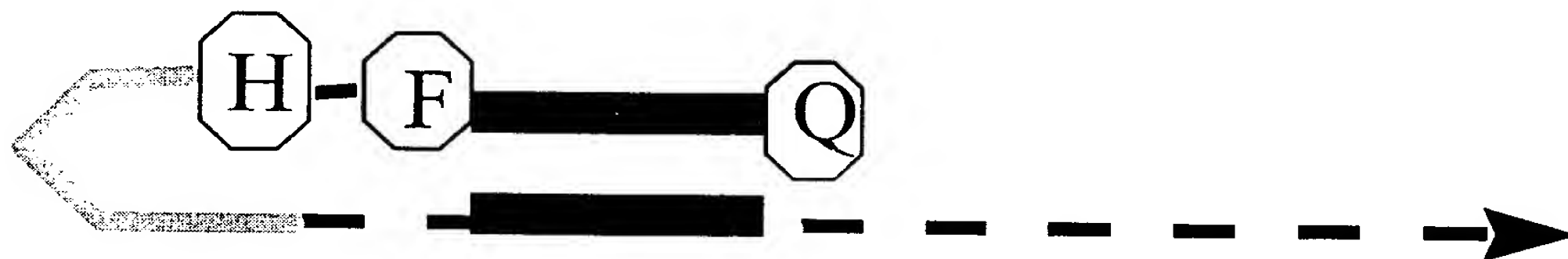
FIG. 1

Figure 2

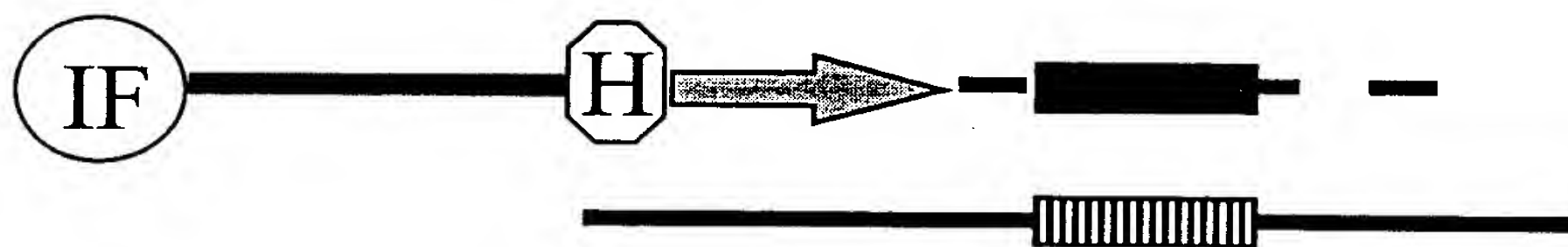


0997042650

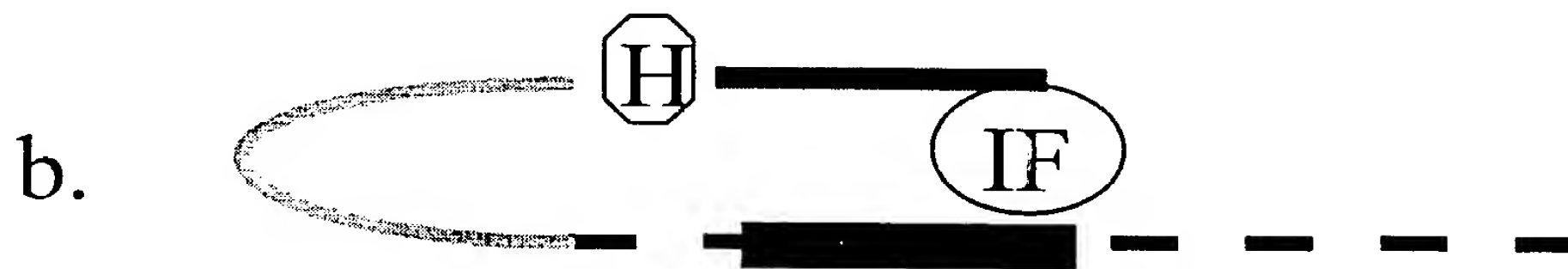
3/42

Figure 309974870-101201
TOTAL 04842660

4/42

Figure 4

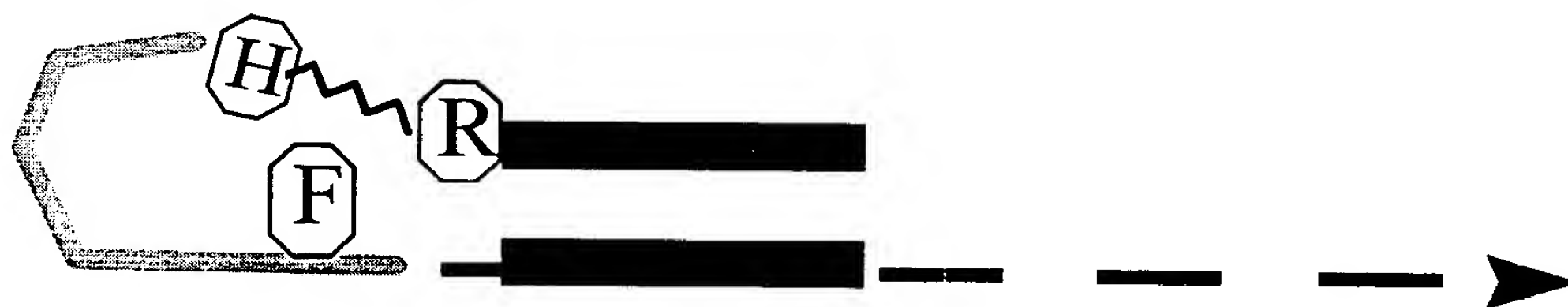
a.



b.

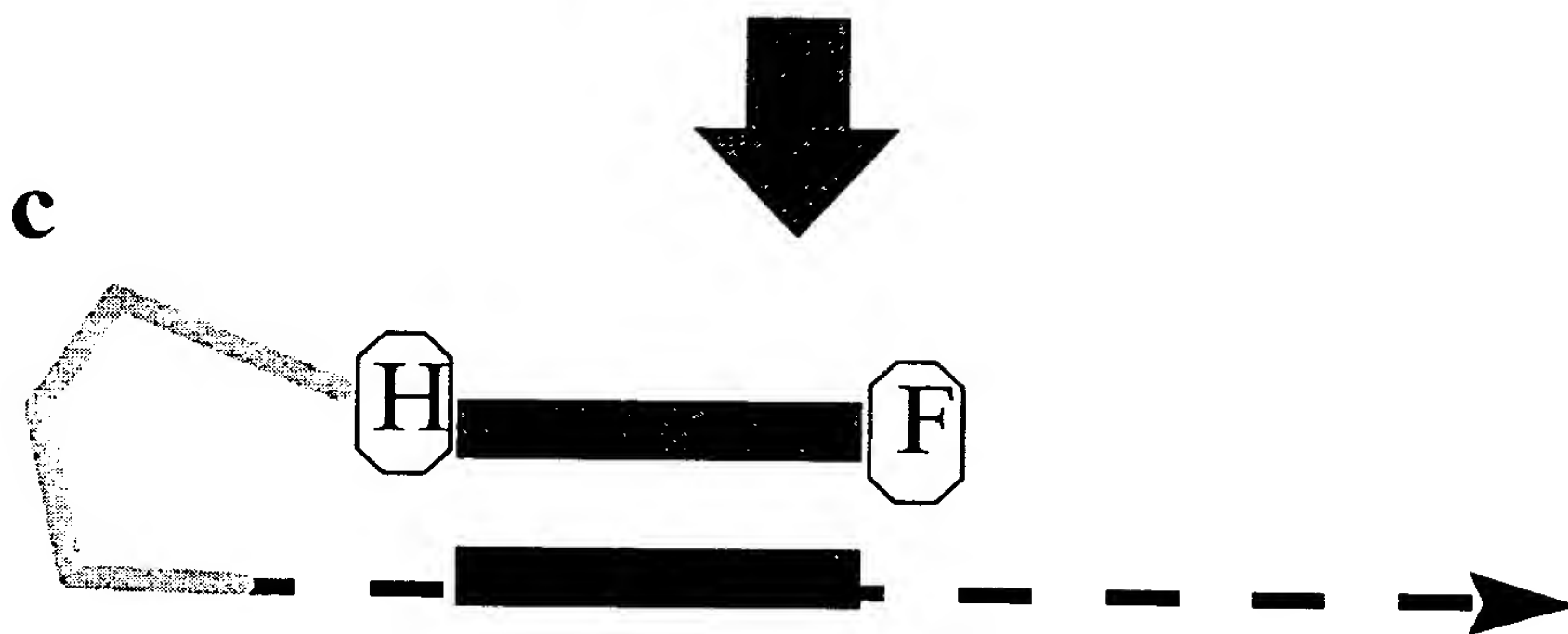
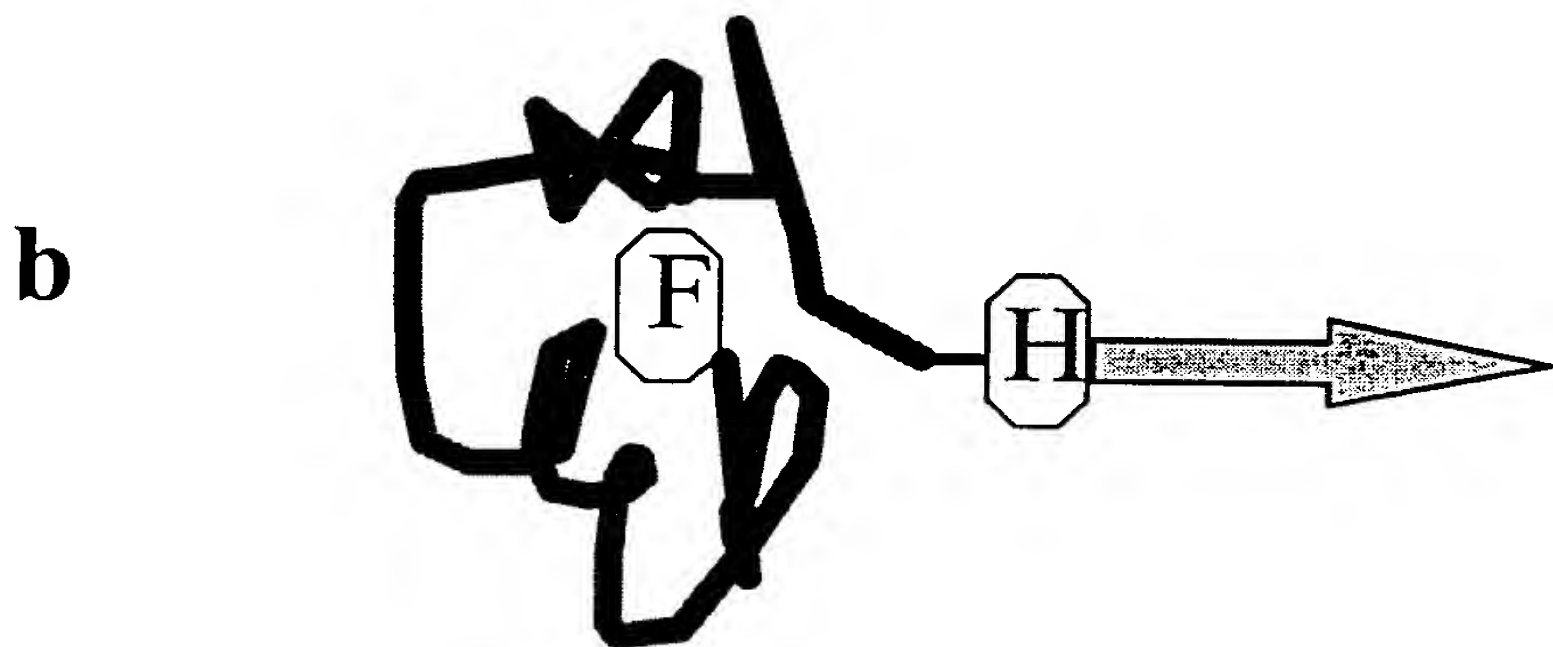
T02F01-0284660

5/42

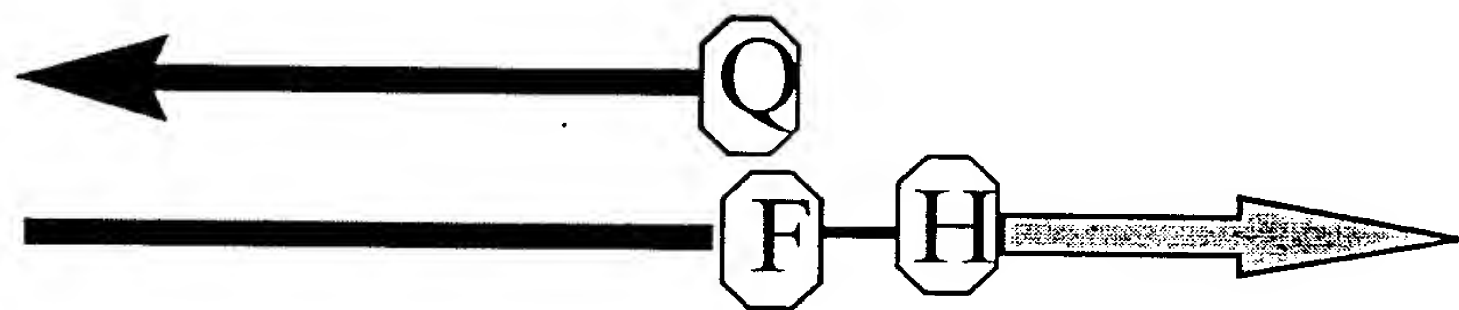
Figure 5

09974870-101201

6/42

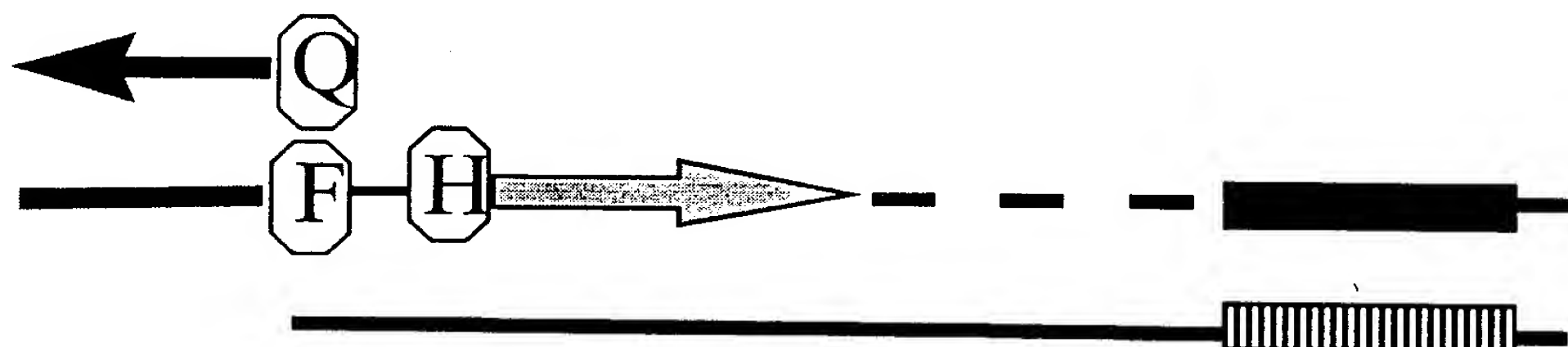
Figure 609974370-10101
TOTAL 0434660

7/42

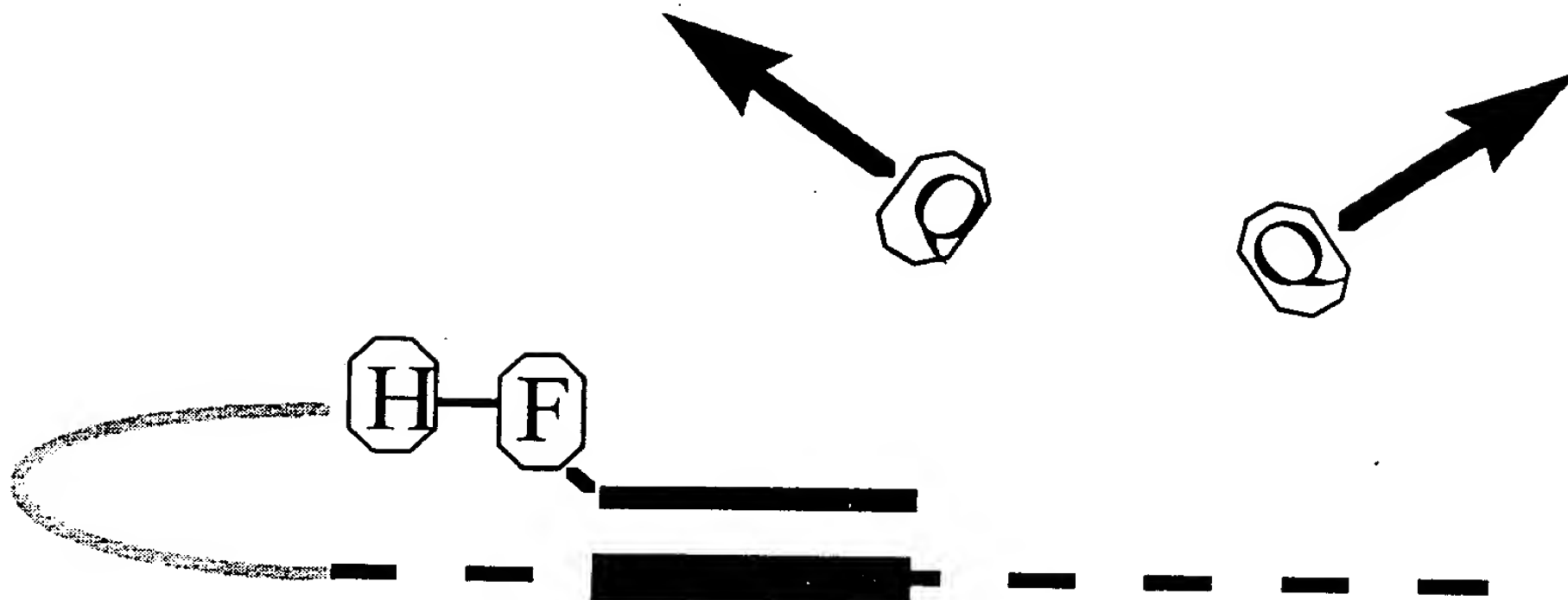
Figure 7a

FOOTNOTES

1. 1990-1991		2. 1992-1993		3. 1994-1995		4. 1996-1997		5. 1998-1999		6. 2000-2001		7. 2002-2003		8. 2004-2005		9. 2006-2007		10. 2008-2009		11. 2010-2011		12. 2012-2013		13. 2014-2015		14. 2016-2017		15. 2018-2019		16. 2020-2021		17. 2022-2023		18. 2024-2025		19. 2026-2027		20. 2028-2029		21. 2030-2031		22. 2032-2033		23. 2034-2035		24. 2036-2037		25. 2038-2039		26. 2040-2041		27. 2042-2043		28. 2044-2045		29. 2046-2047		30. 2048-2049		31. 2050-2051		32. 2052-2053		33. 2054-2055		34. 2056-2057		35. 2058-2059		36. 2060-2061		37. 2062-2063		38. 2064-2065		39. 2066-2067		40. 2068-2069		41. 2070-2071		42. 2072-2073		43. 2074-2075		44. 2076-2077		45. 2078-2079		46. 2080-2081		47. 2082-2083		48. 2084-2085		49. 2086-2087		50. 2088-2089		51. 2090-2091		52. 2092-2093		53. 2094-2095		54. 2096-2097		55. 2098-2099		56. 2100-2101		57. 2102-2103		58. 2104-2105		59. 2106-2107		60. 2108-2109		61. 2110-2111		62. 2112-2113		63. 2114-2115		64. 2116-2117		65. 2118-2119		66. 2120-2121		67. 2122-2123		68. 2124-2125		69. 2126-2127		70. 2128-2129		71. 2130-2131		72. 2132-2133		73. 2134-2135		74. 2136-2137		75. 2138-2139		76. 2140-2141		77. 2142-2143		78. 2144-2145		79. 2146-2147		80. 2148-2149		81. 2150-2151		82. 2152-2153		83. 2154-2155		84. 2156-2157		85. 2158-2159		86. 2160-2161		87. 2162-2163		88. 2164-2165		89. 2166-2167		90. 2168-2169		91. 2170-2171		92. 2172-2173		93. 2174-2175		94. 2176-2177		95. 2178-2179		96. 2180-2181		97. 2182-2183		98. 2184-2185		99. 2186-2187		100. 2188-2189		101. 2190-2191		102. 2192-2193		103. 2194-2195		104. 2196-2197		105. 2198-2199		106. 2200-2201		107. 2202-2203		108. 2204-2205		109. 2206-2207		110. 2208-2209		111. 2210-2211		112. 2212-2213		113. 2214-2215		114. 2216-2217		115. 2218-2219		116. 2220-2221		117. 2222-2223		118. 2224-2225		119. 2226-2227		120. 2228-2229		121. 2230-2231		122. 2232-2233		123. 2234-2235		124. 2236-2237		125. 2238-2239		126. 2240-2241		127. 2242-2243		128. 2244-2245		129. 2246-2247		130. 2248-2249		131. 2250-2251		132. 2252-2253		133. 2254-2255		134. 2256-2257		135. 2258-2259		136. 2260-2261		137. 2262-2263		138. 2264-2265		139. 2266-2267		140. 2268-2269		141. 2270-2271		142. 2272-2273		143. 2274-2275		144. 2276-2277		145. 2278-2279		146. 2280-2281		147. 2282-2283		148. 2284-2285		149. 2286-2287		150. 2288-2289		151. 2290-2291		152. 2292-2293		153. 2294-2295		154. 2296-2297		155. 2298-2299		156. 2300-2301		157. 2302-2303		158. 2304-2305		159. 2306-2307		160. 2308-2309		161. 2310-2311		162. 2312-2313		163. 2314-2315		164. 2316-2317		165. 2318-2319		166. 2320-2321		167. 2322-2323		168. 2324-2325		169. 2326-2327		170. 2328-2329		171. 2330-2331		172. 2332-2333		173. 2334-2335		174. 2336-2337		175. 2338-2339		176. 2340-2341		177. 2342-2343		178. 2344-2345		179. 2346-2347		180. 2348-2349		181. 2350-2351		182. 2352-2353		1	
--------------	--	--------------	--	--------------	--	--------------	--	--------------	--	--------------	--	--------------	--	--------------	--	--------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	---------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	----------------	--	---	--

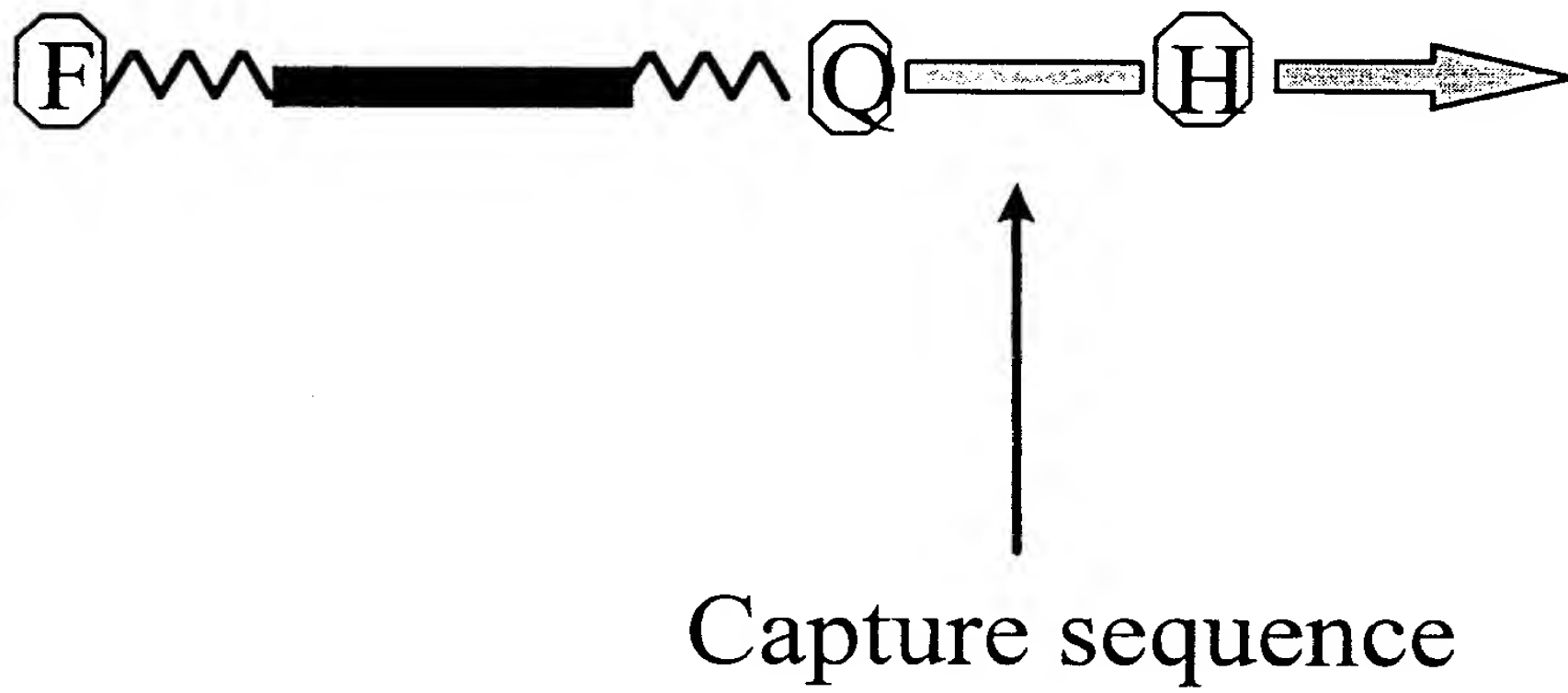


9/42

Figure 7c

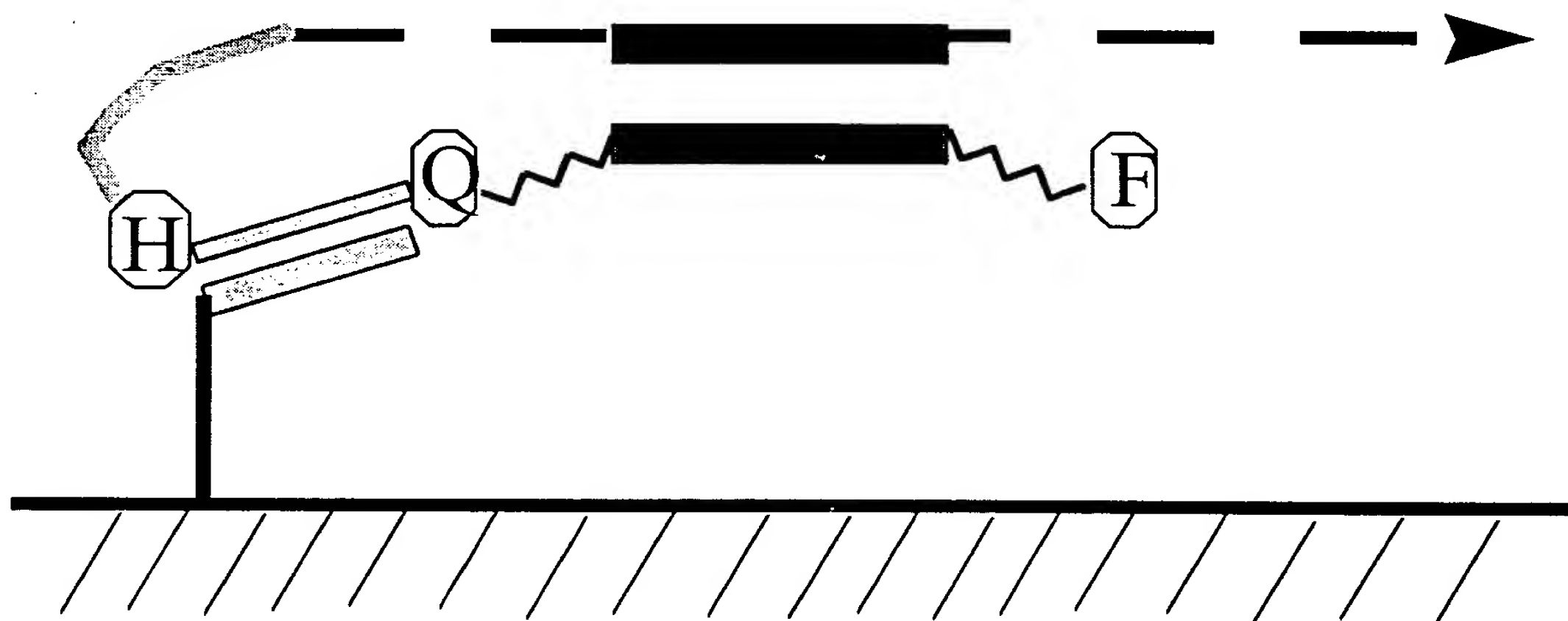
0394830-10101

10/42

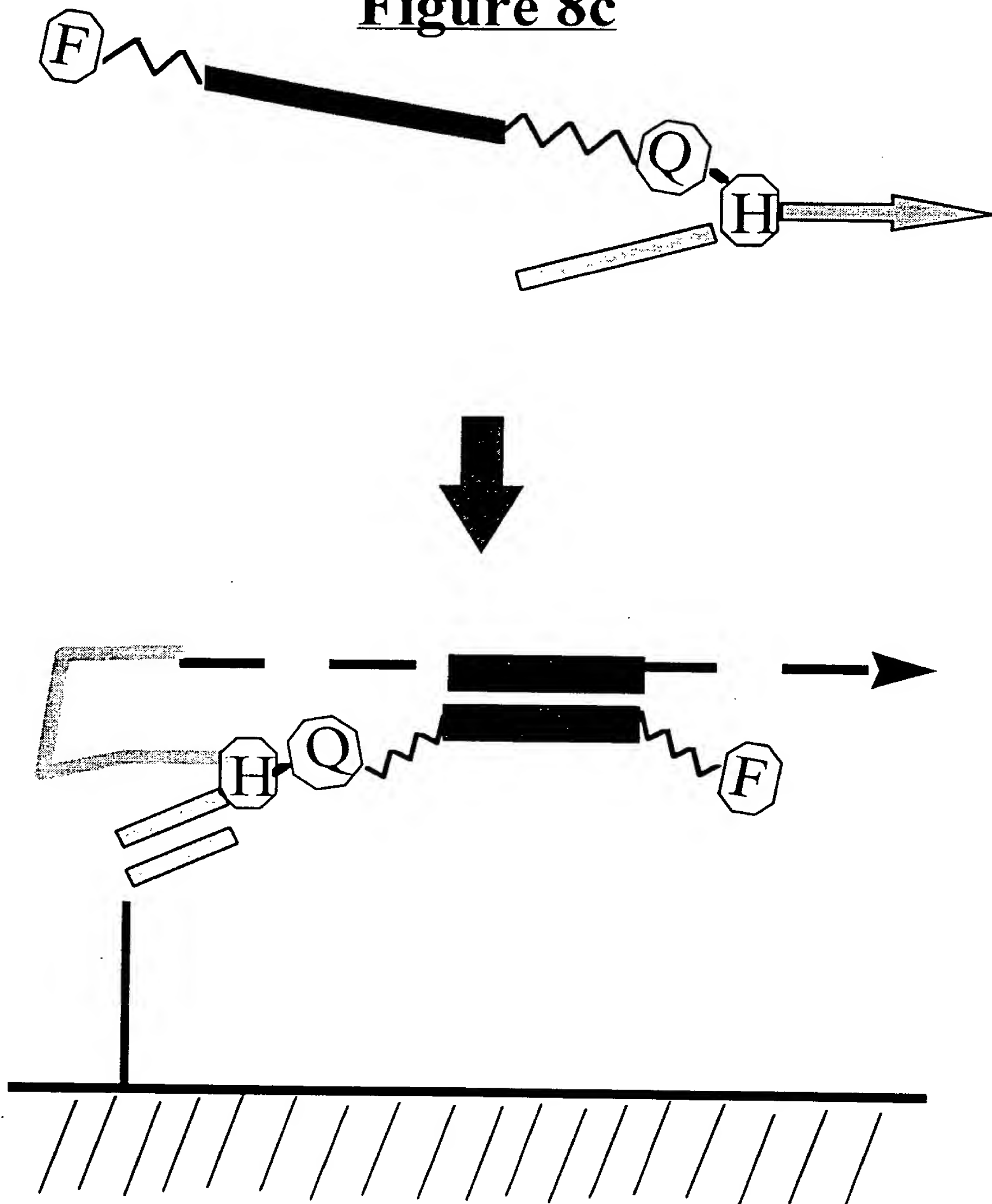
Figure 8a

FOOT-0284260

11/42

Figure 8b099460-1010
FOI/07-0347650

12/42

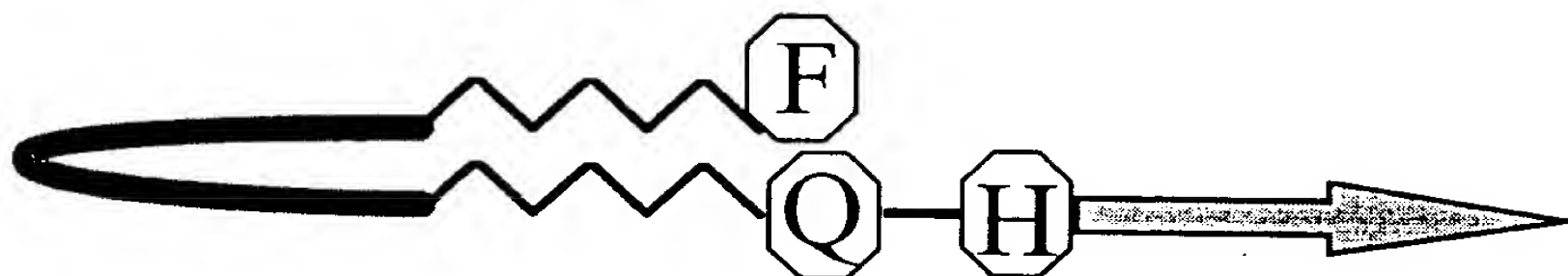
Figure 8c

TOTAL 04342660

13/42

Figure 9

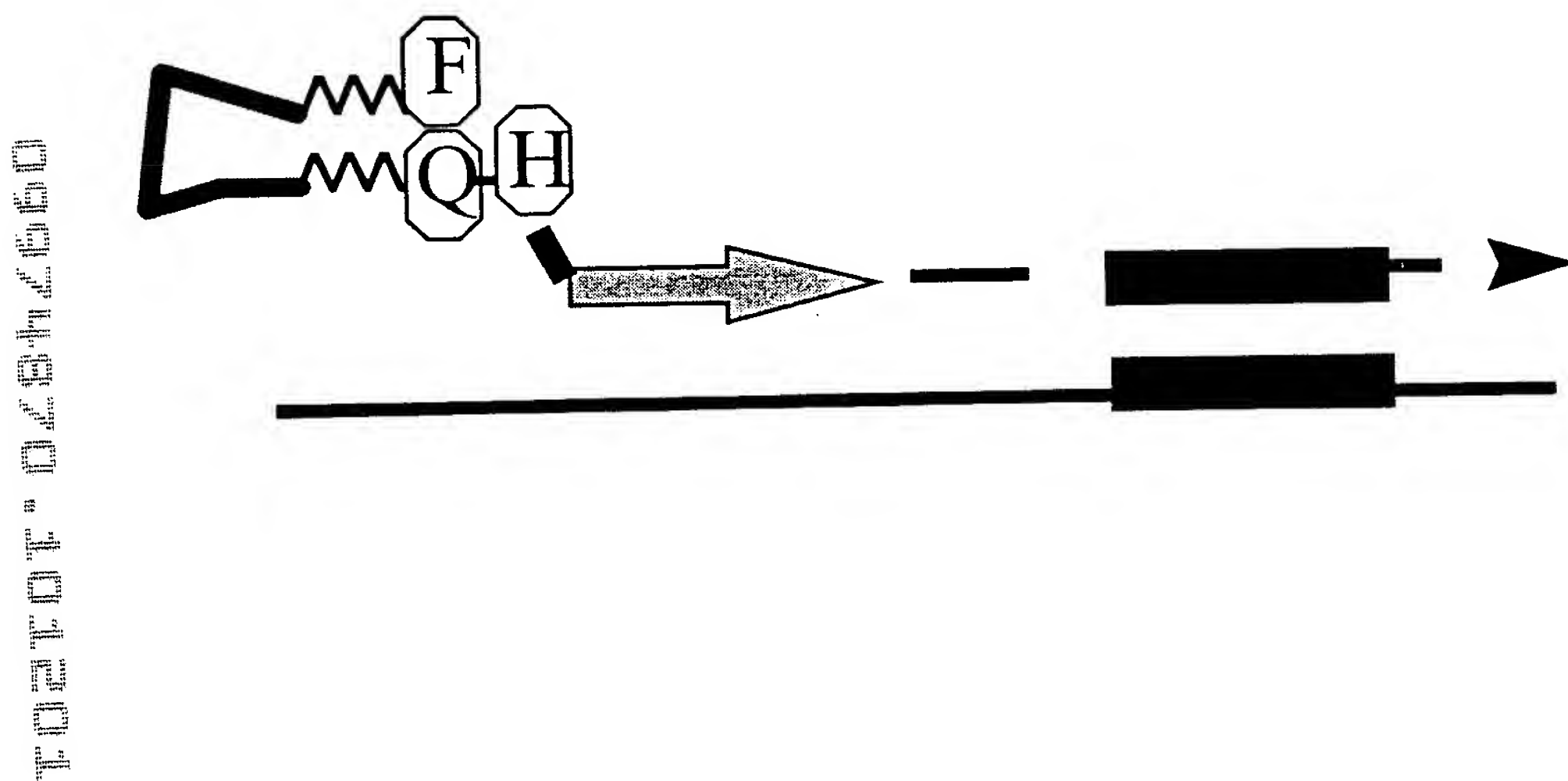
a.



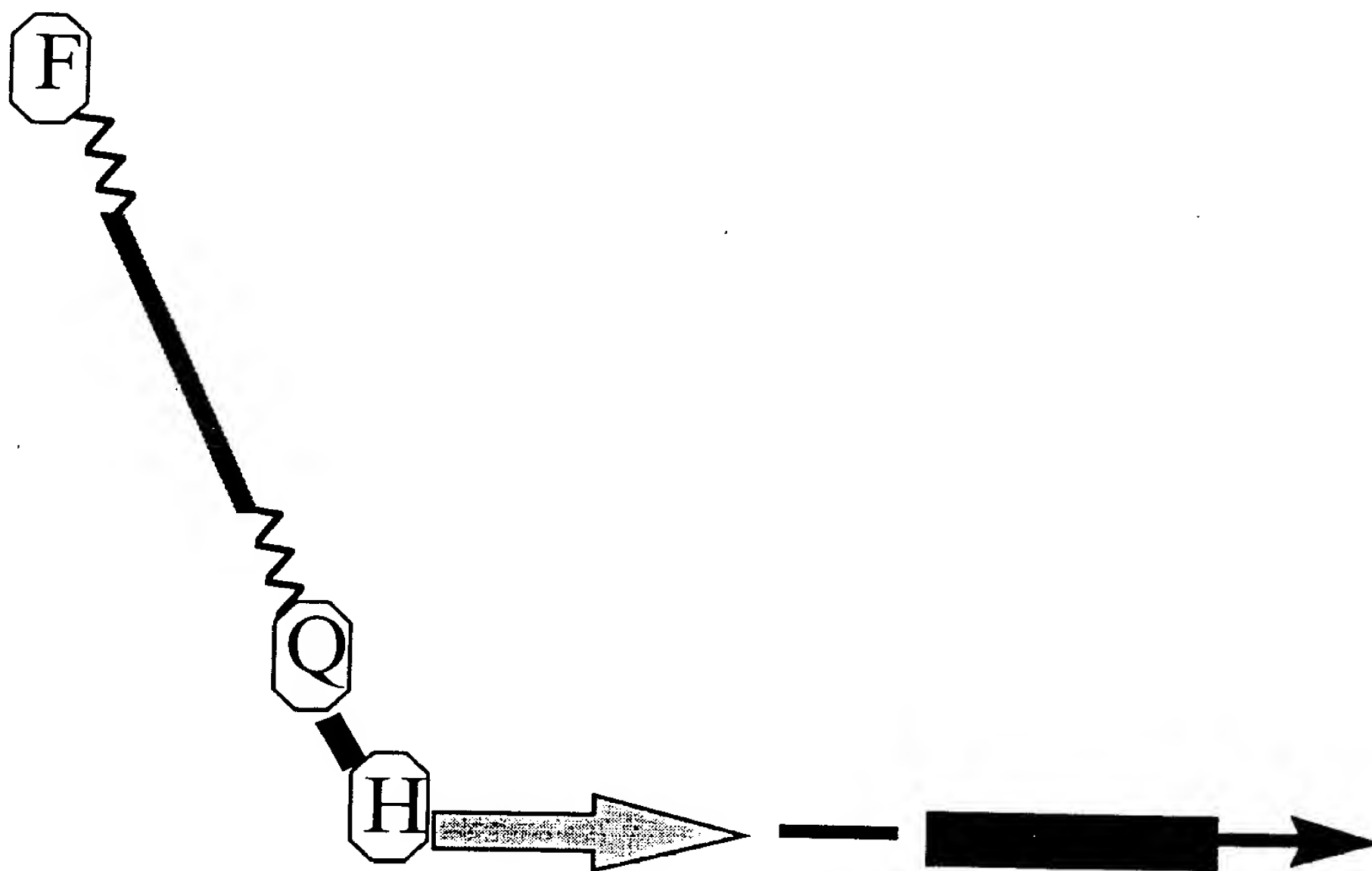
b.

TOP SECRET 02842560

14/42

Figure 10a

15/42

Figure 10b

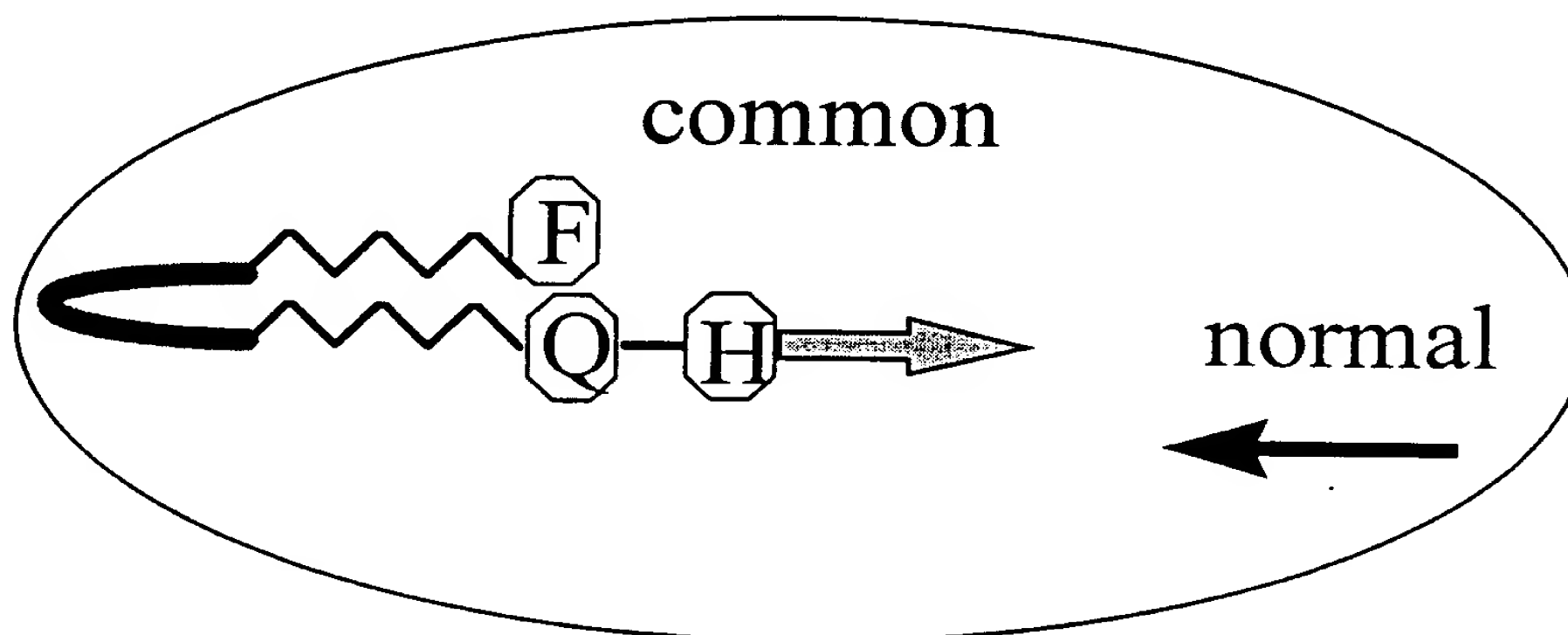
T.03T.0T" 0/34/660

16/42

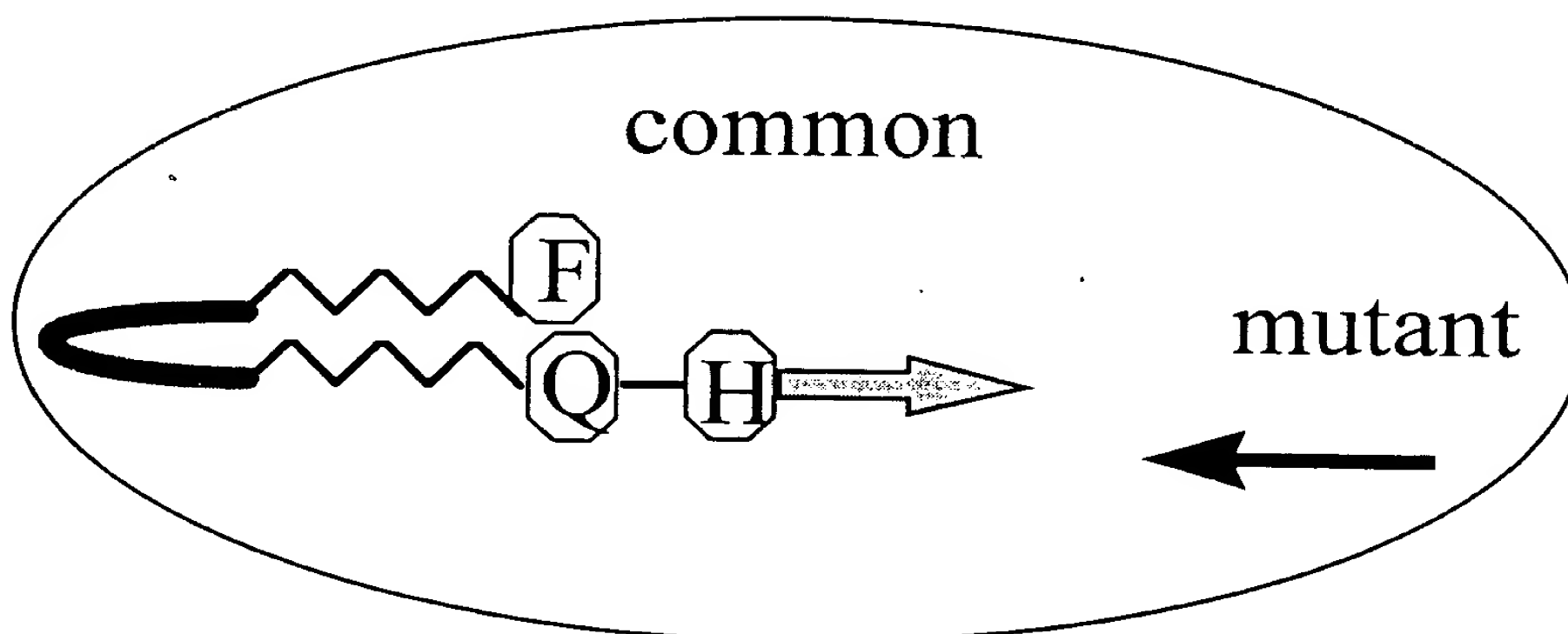
Figure 10c

FOOT 04242660

17/42

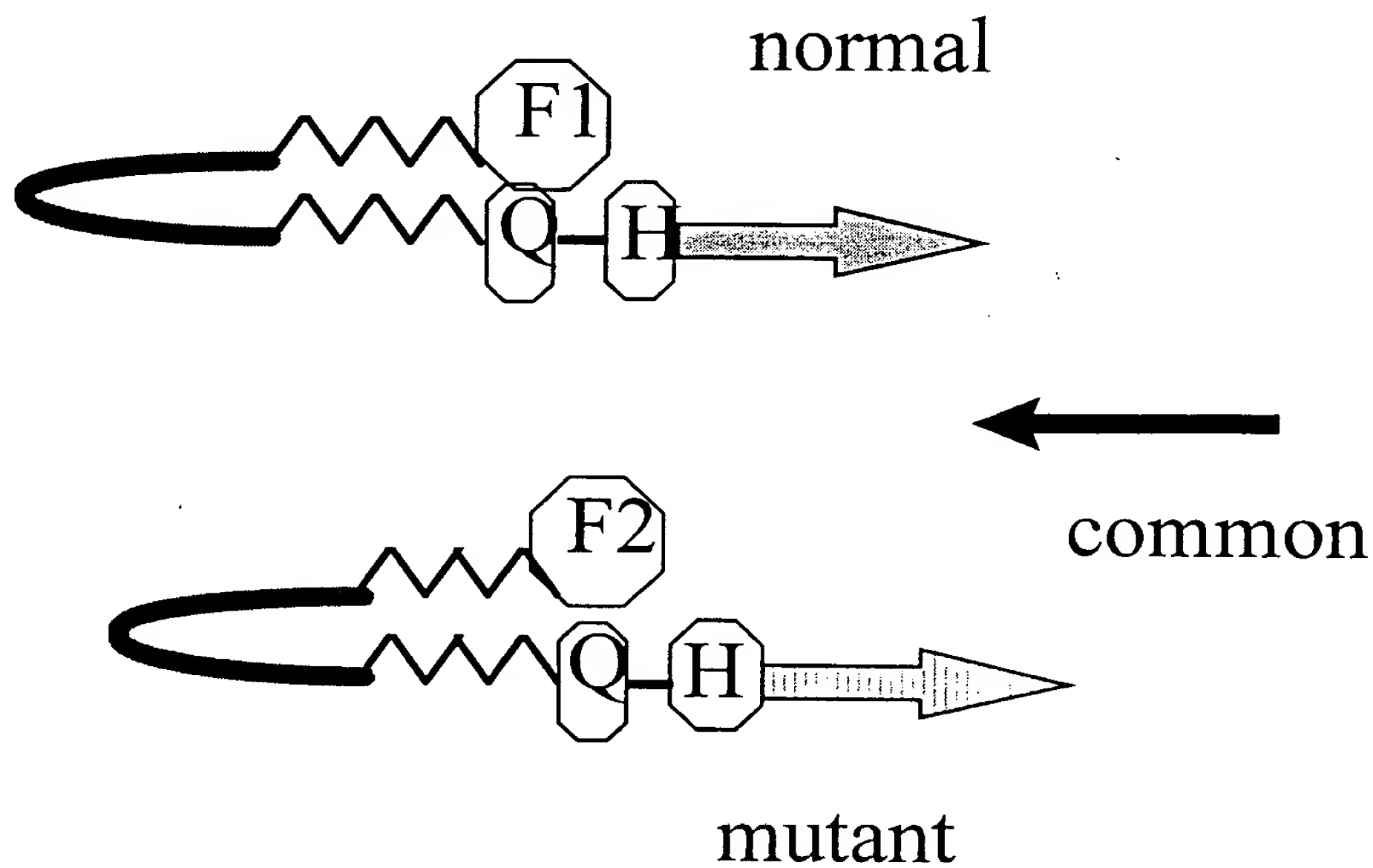
Figure 11a

2-tube test



09974870-101201

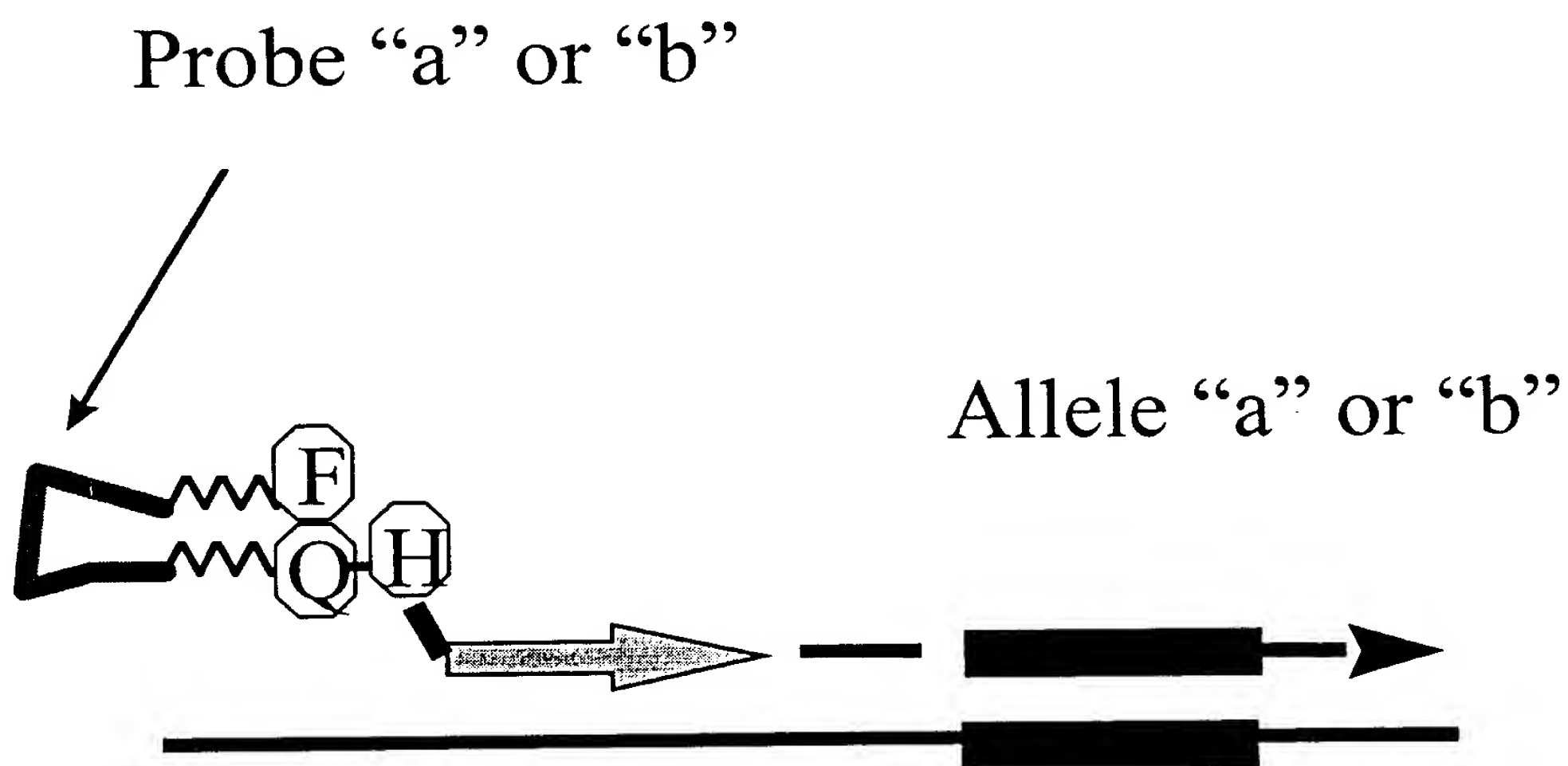
18/42

Figure 11b

Single tube test

TOP SECRET

19/42

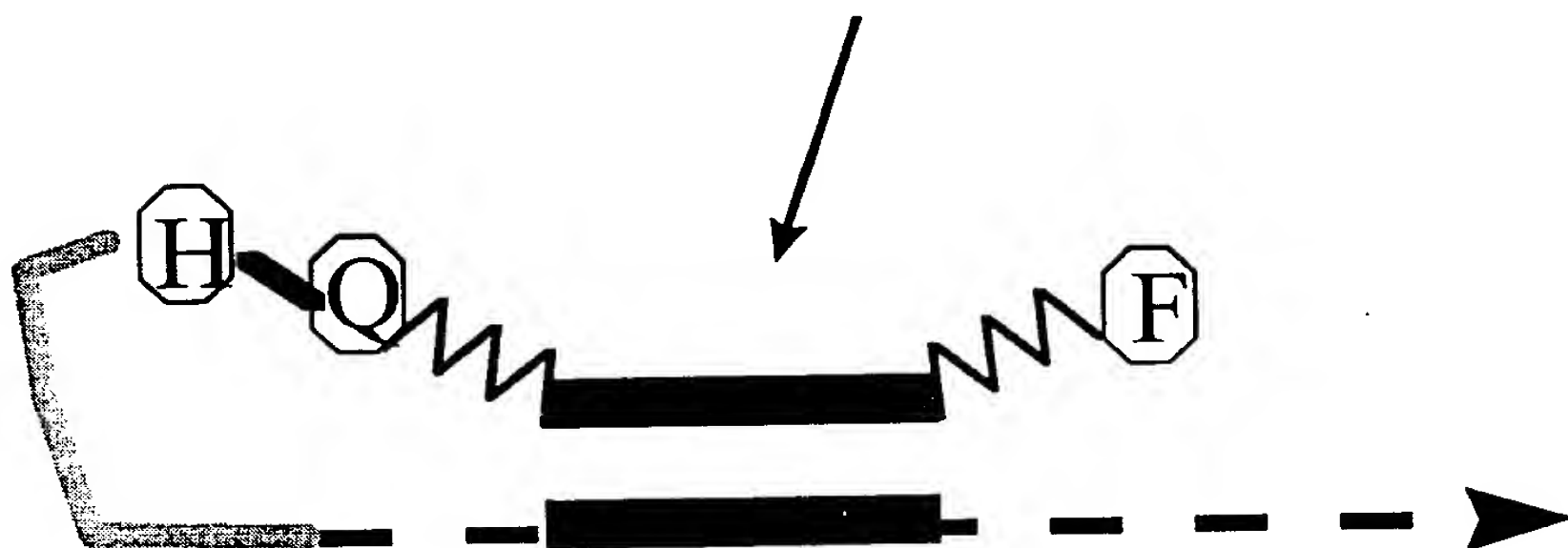
Figure 12a

T02T0T 0284650

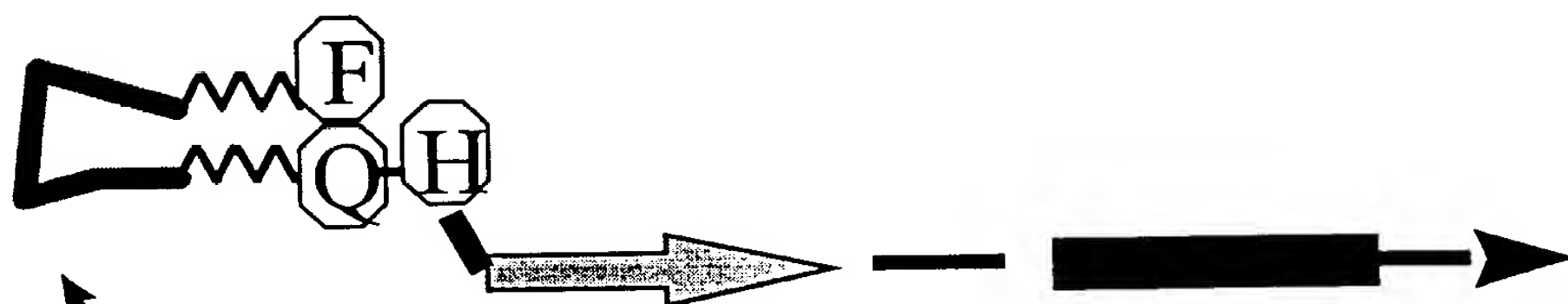
20/42

Figure 12b

Probe matches target,
fluorophore unquenched



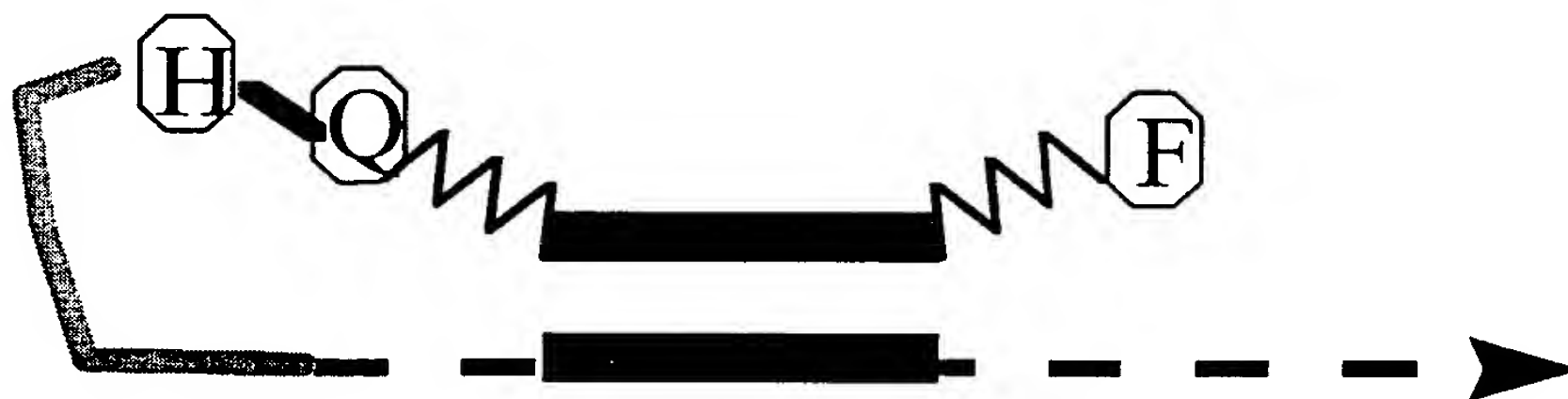
OR



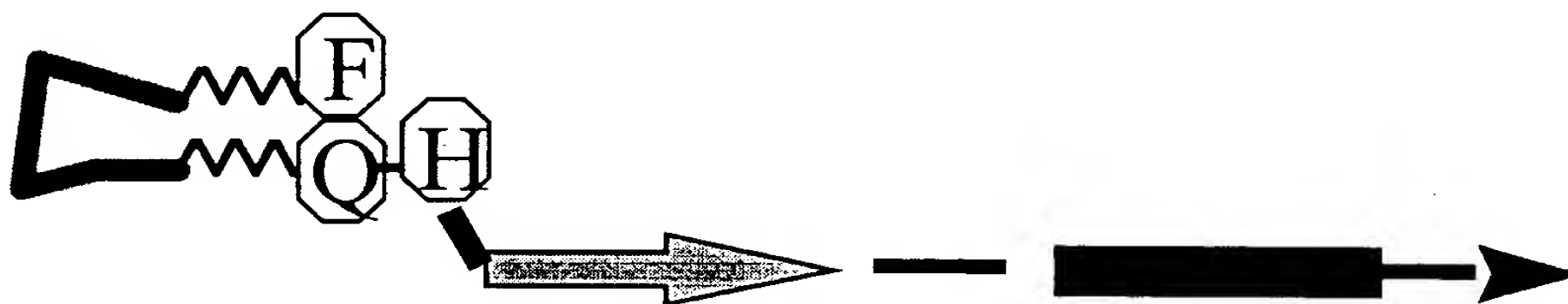
Probe and target mismatch,
internally quenched conformation
forms

FOOTNOTES

21/42

Figure 12c

OR



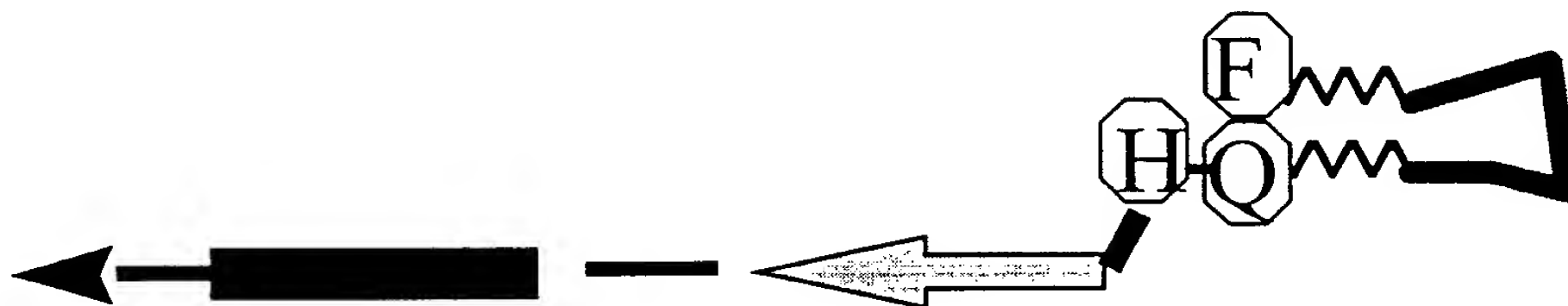
For allele "a" on the forward strand

T02T0T" 02842650

22/42

Figure 12d

OR

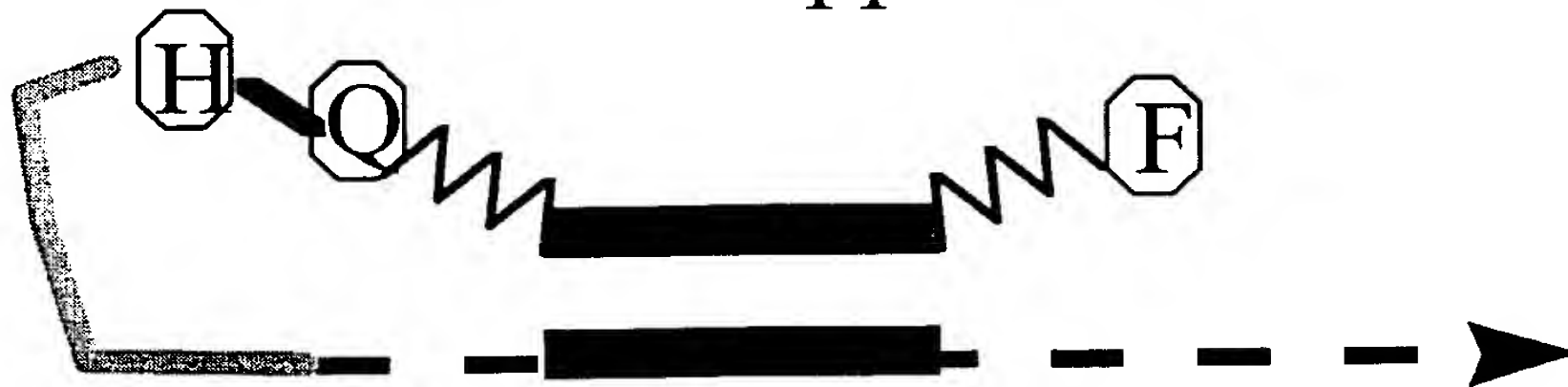


For allele "b" on the reverse strand

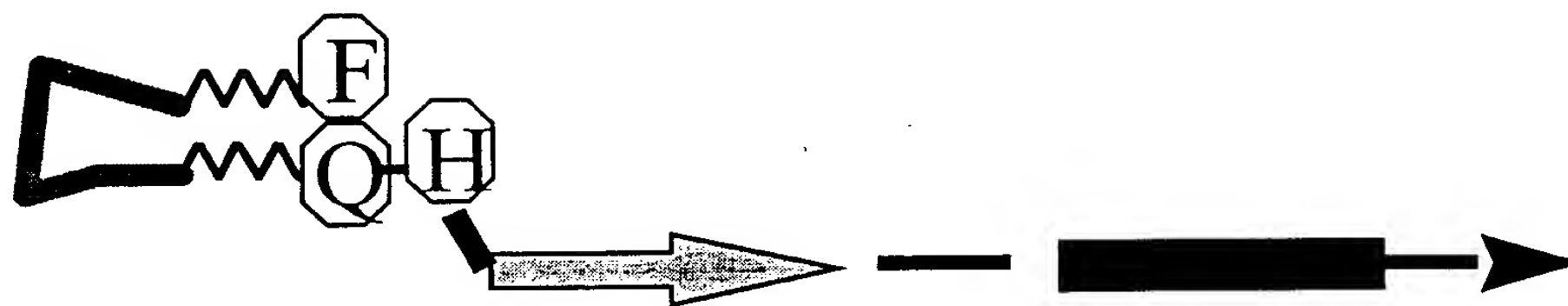
23/42

Figure 12e

Allelic discrimination
on the upper strand



OR



PLUS

Amplicon control on
the other strand
using a second fluorophore

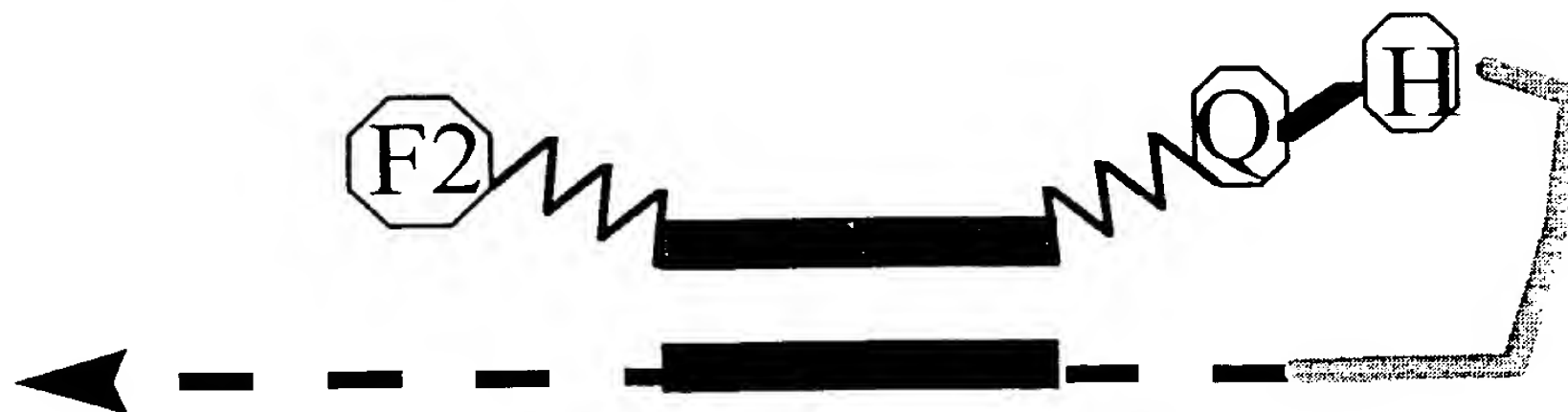
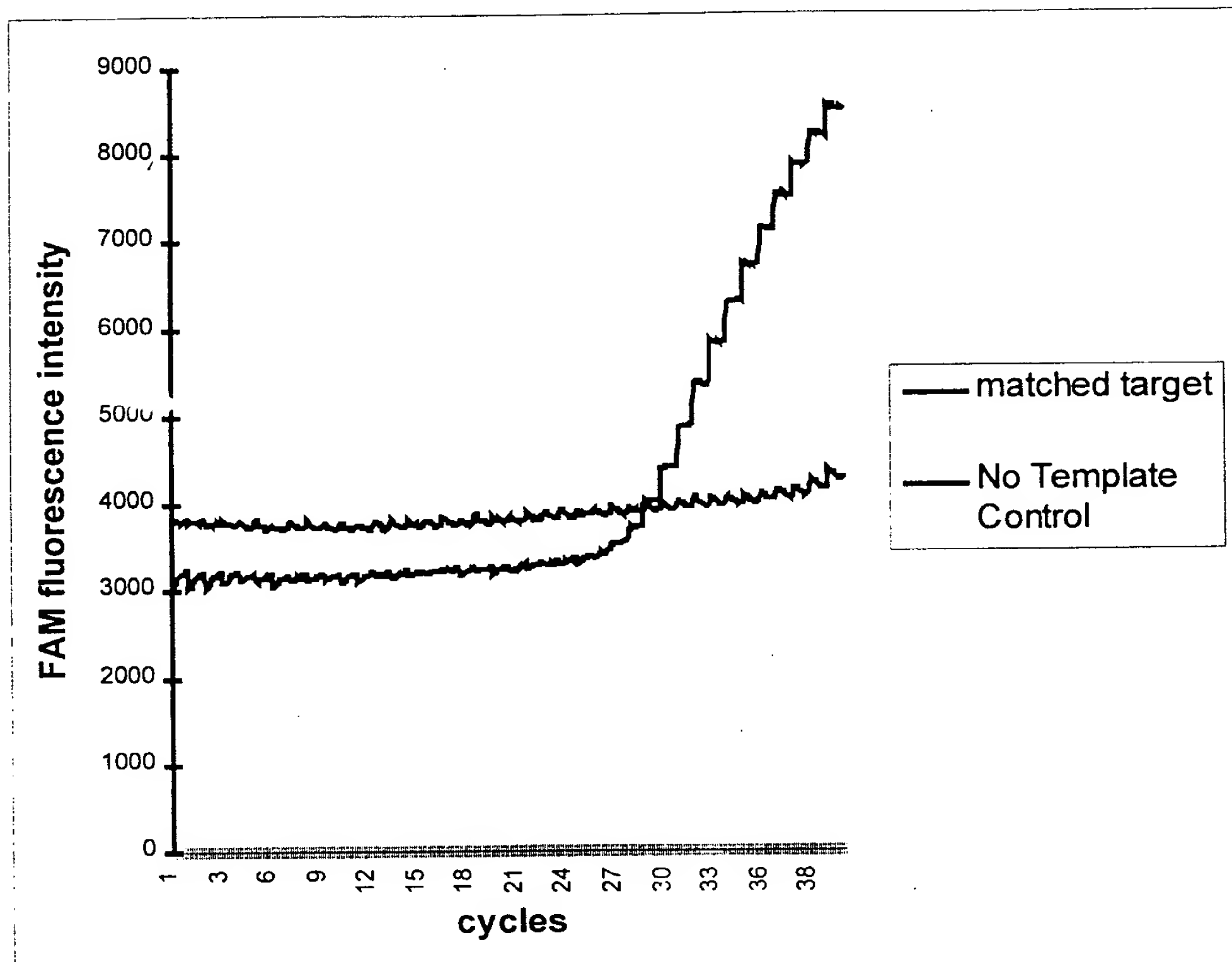


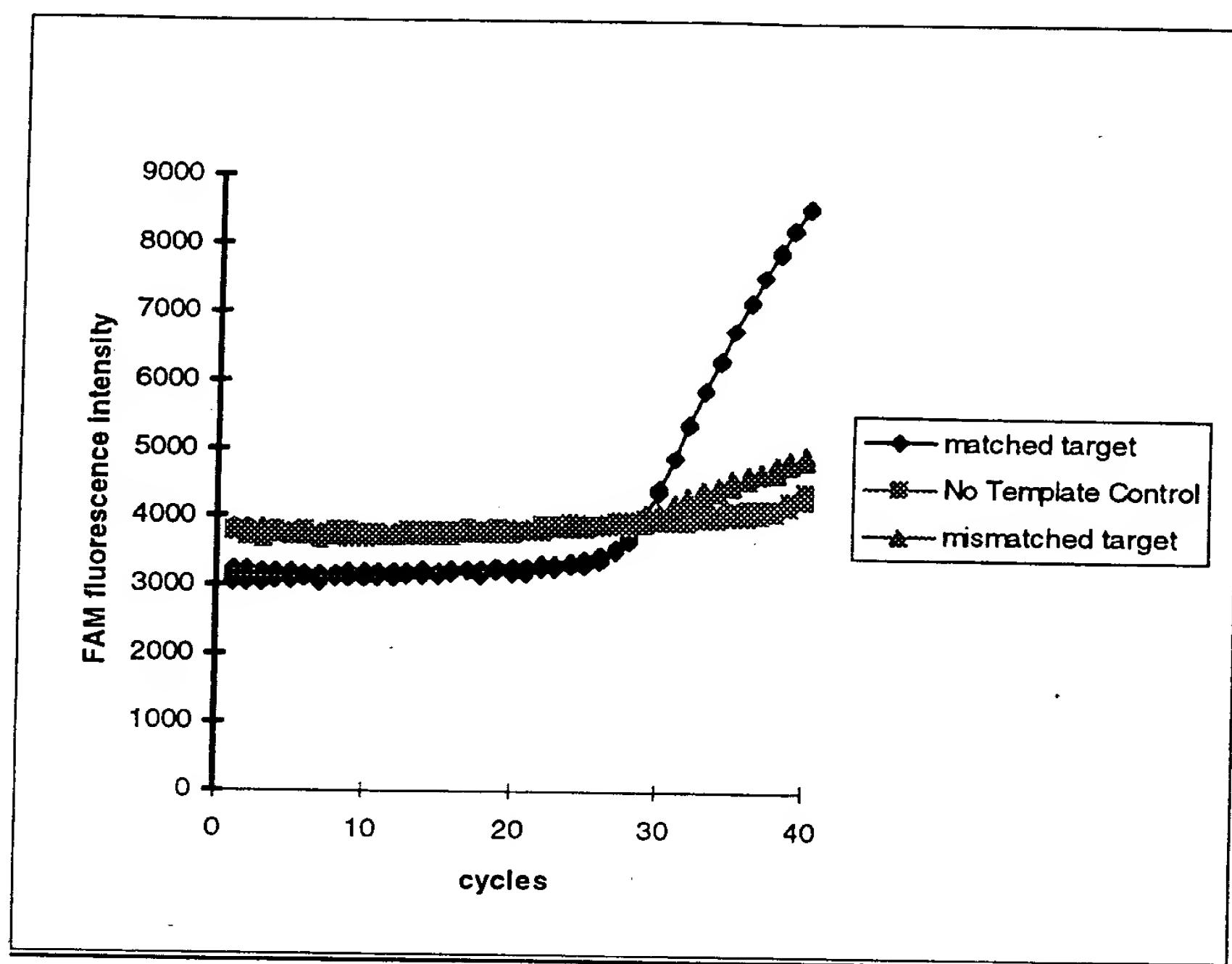
FIG. 12e

24/42

FIGURE 13

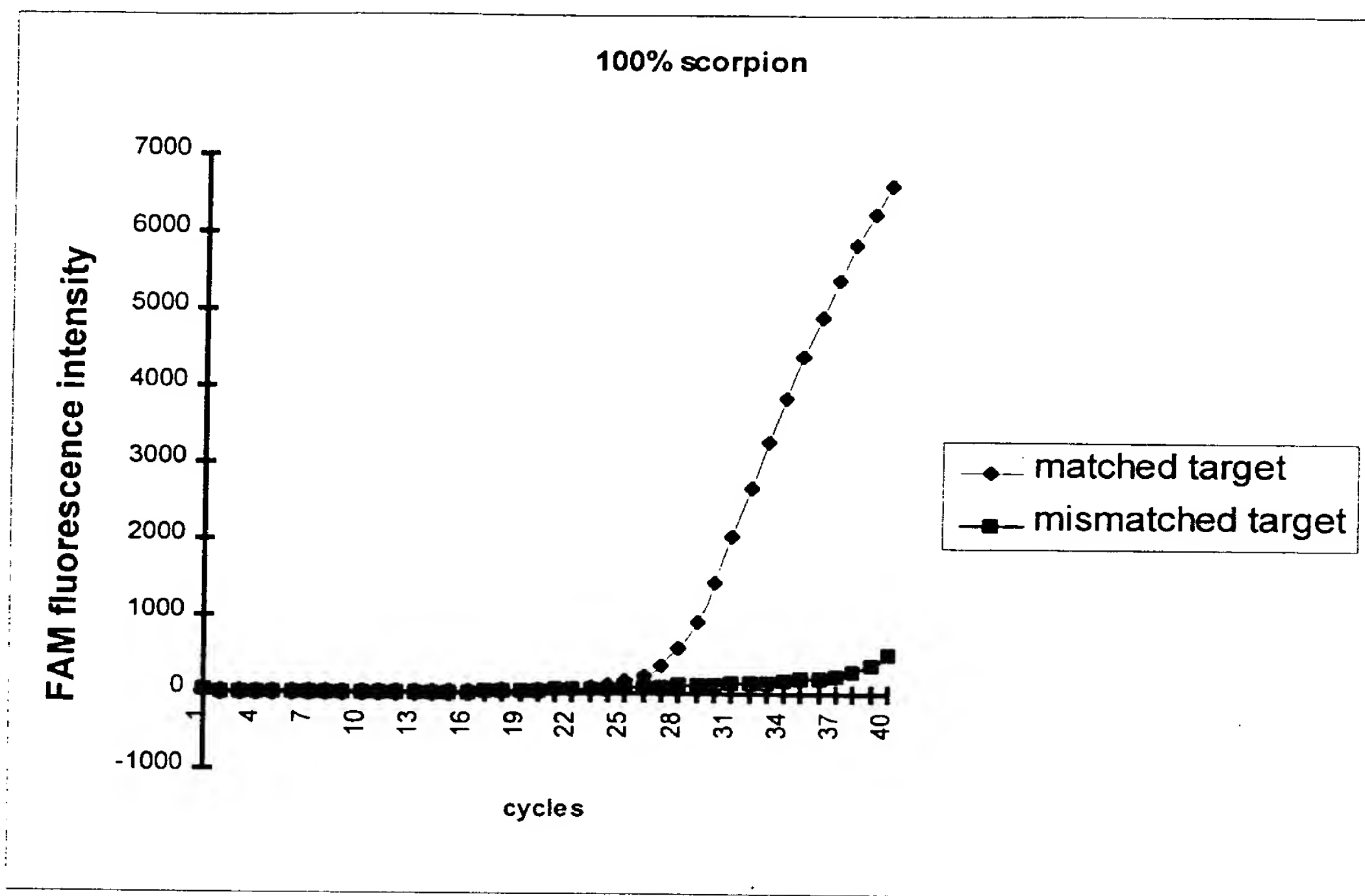
TOTAL 0434660

25/42

FIGURE 14

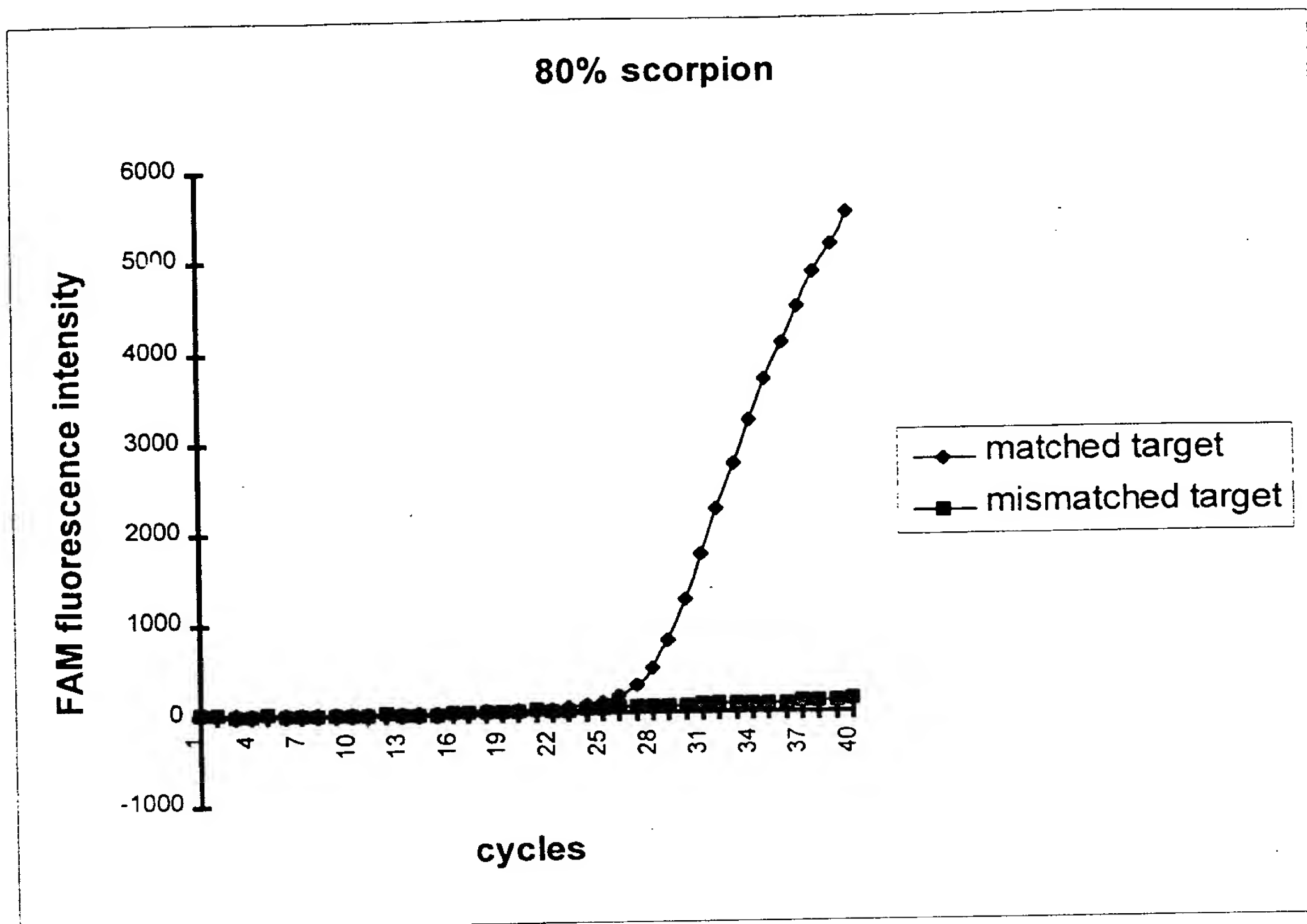
FOOT 02342660

26/42

FIGURE 15a

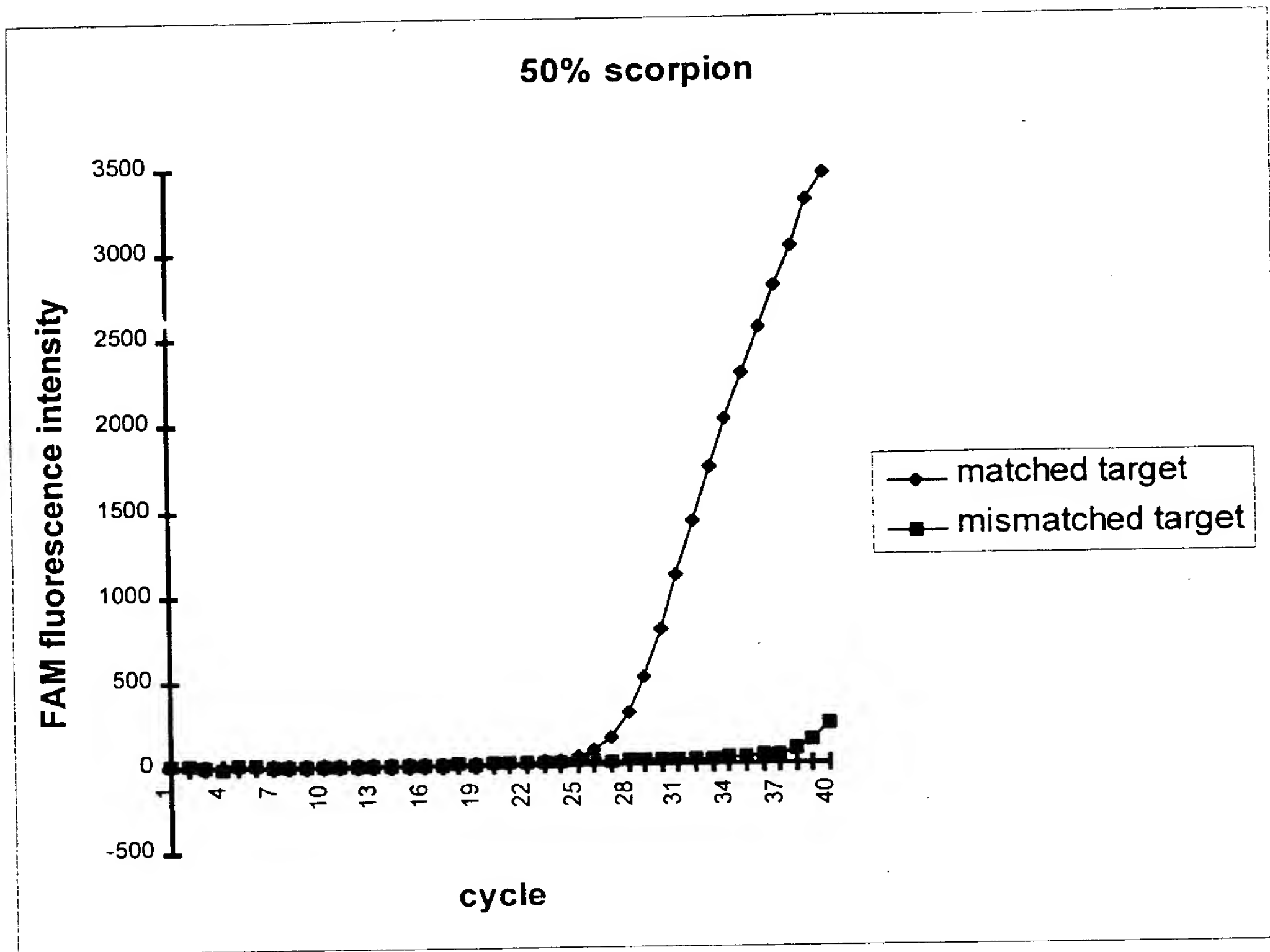
FOOTNOTES

27/42

FIGURE 15b

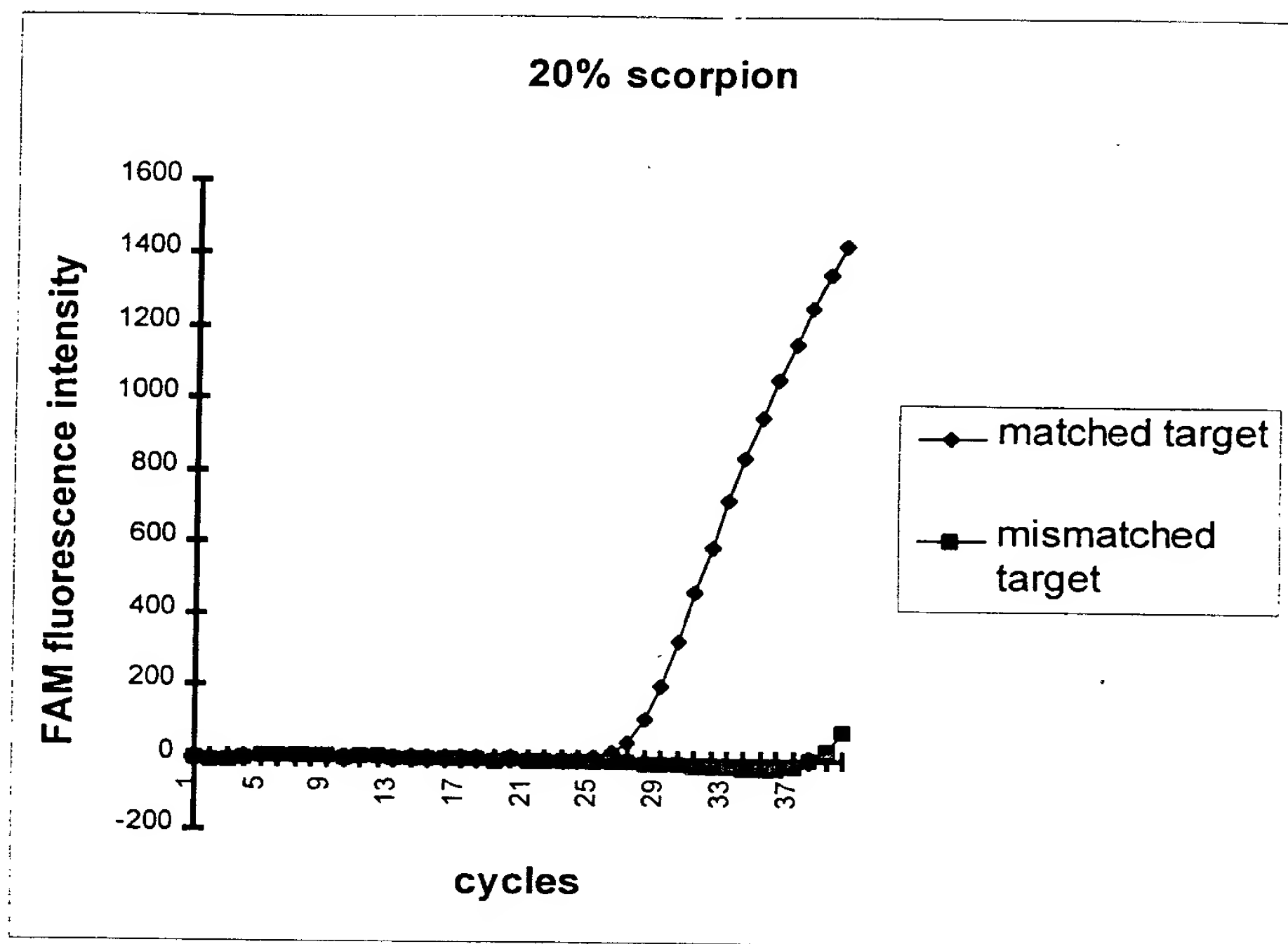
FOOTNOTES

28/42

FIGURE 15c

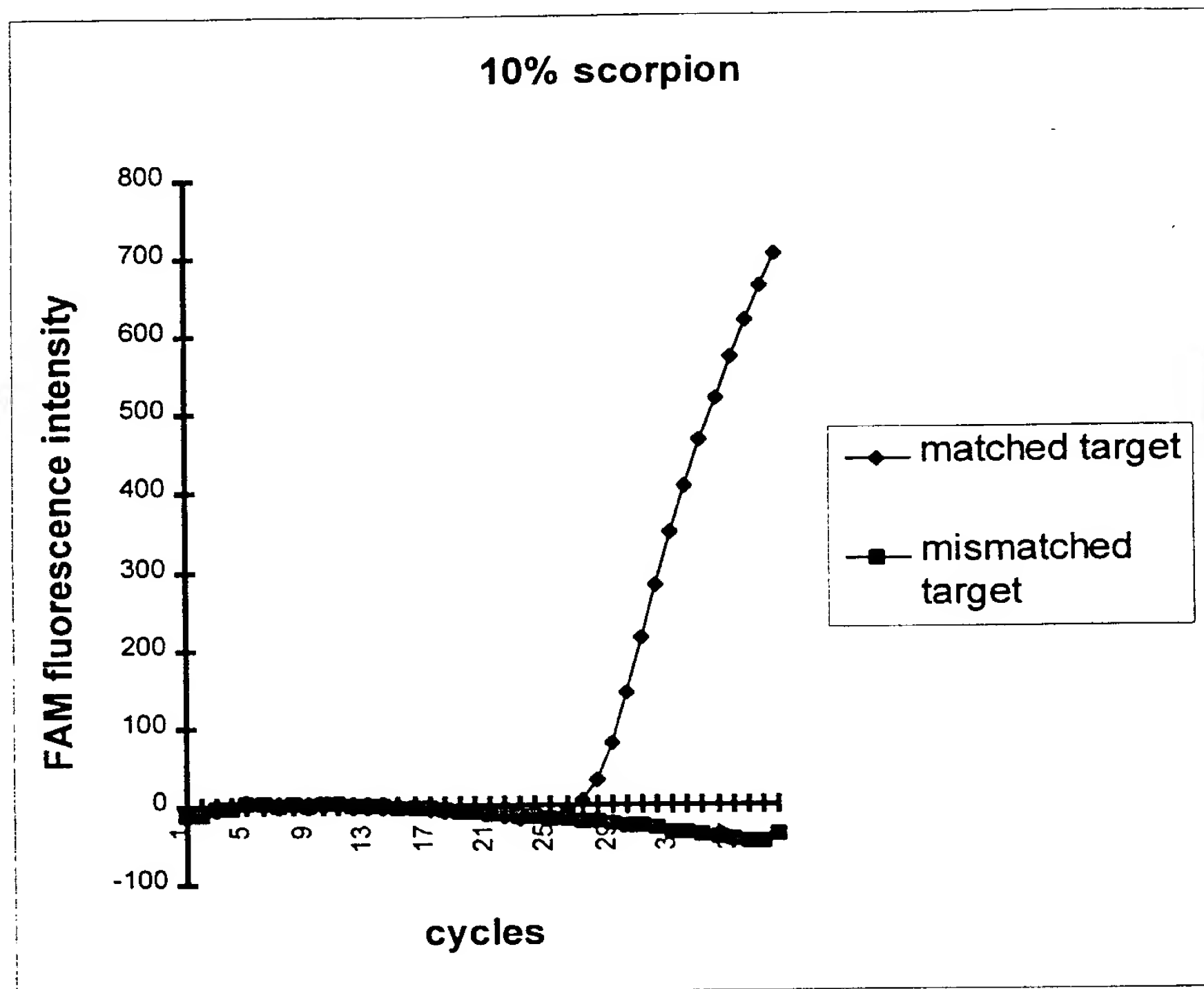
T0220T 02342660

29/42

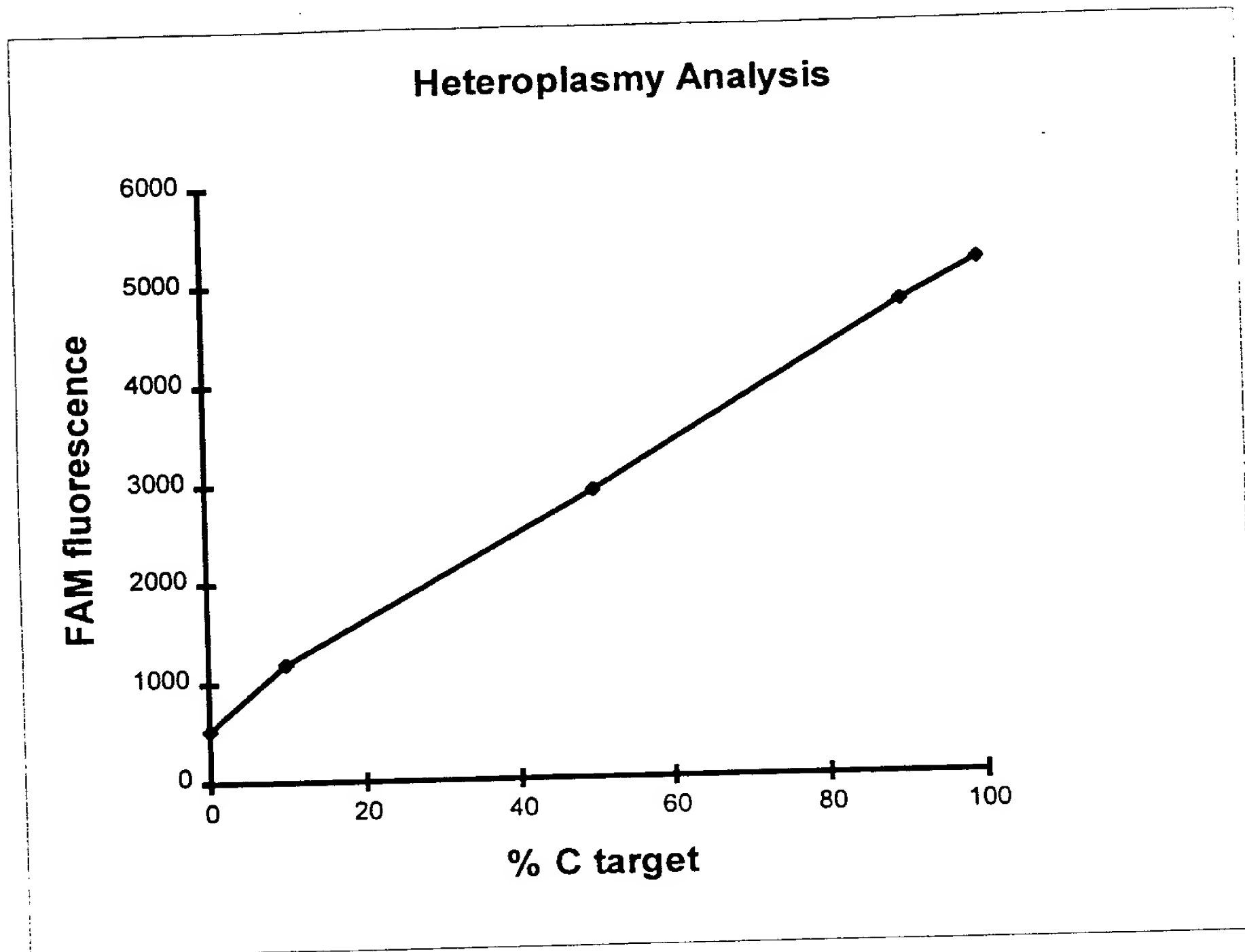
FIGURE 15d

TOTAL 0434650

30/42

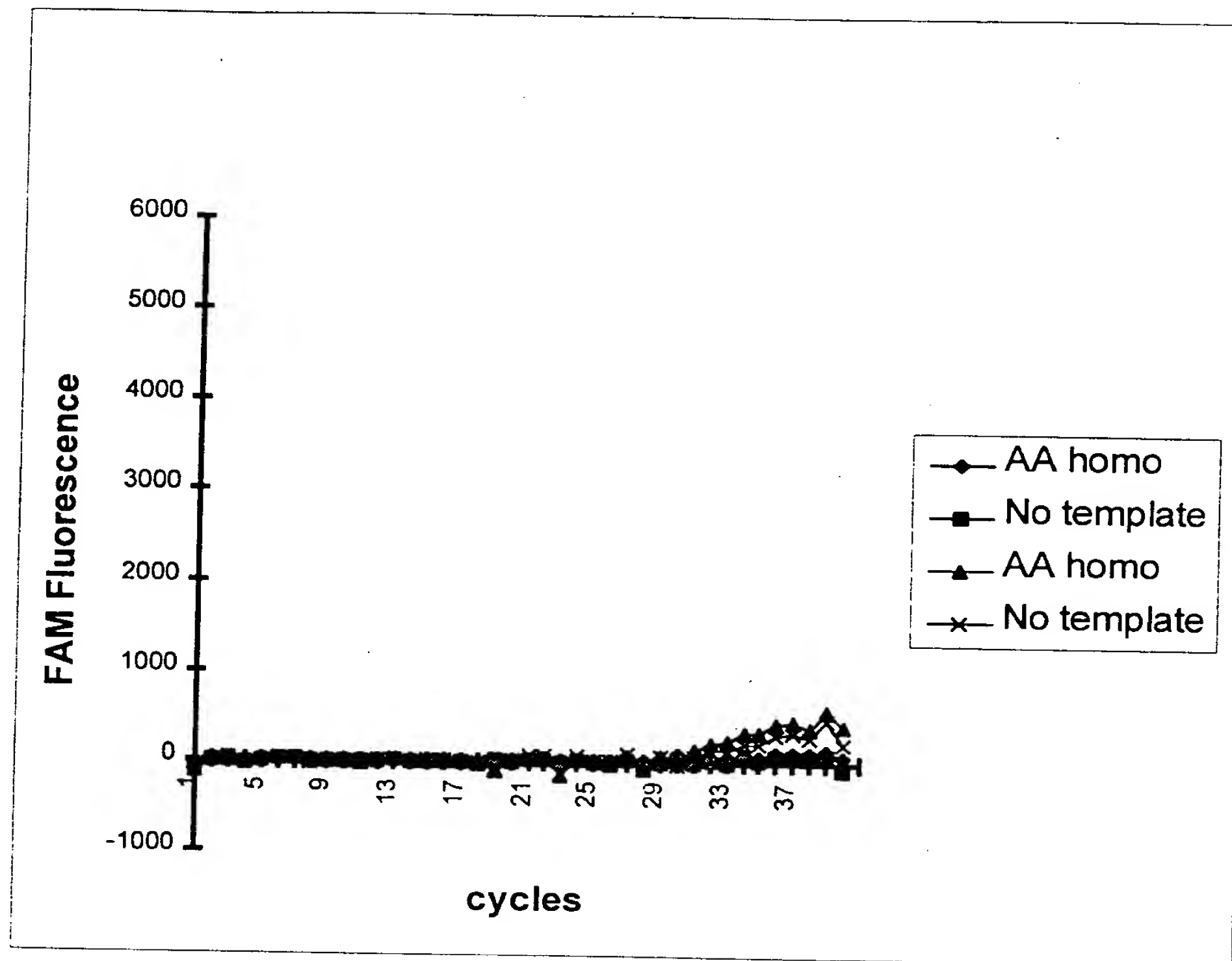
FIGURE 15e

31/42

FIGURE 16

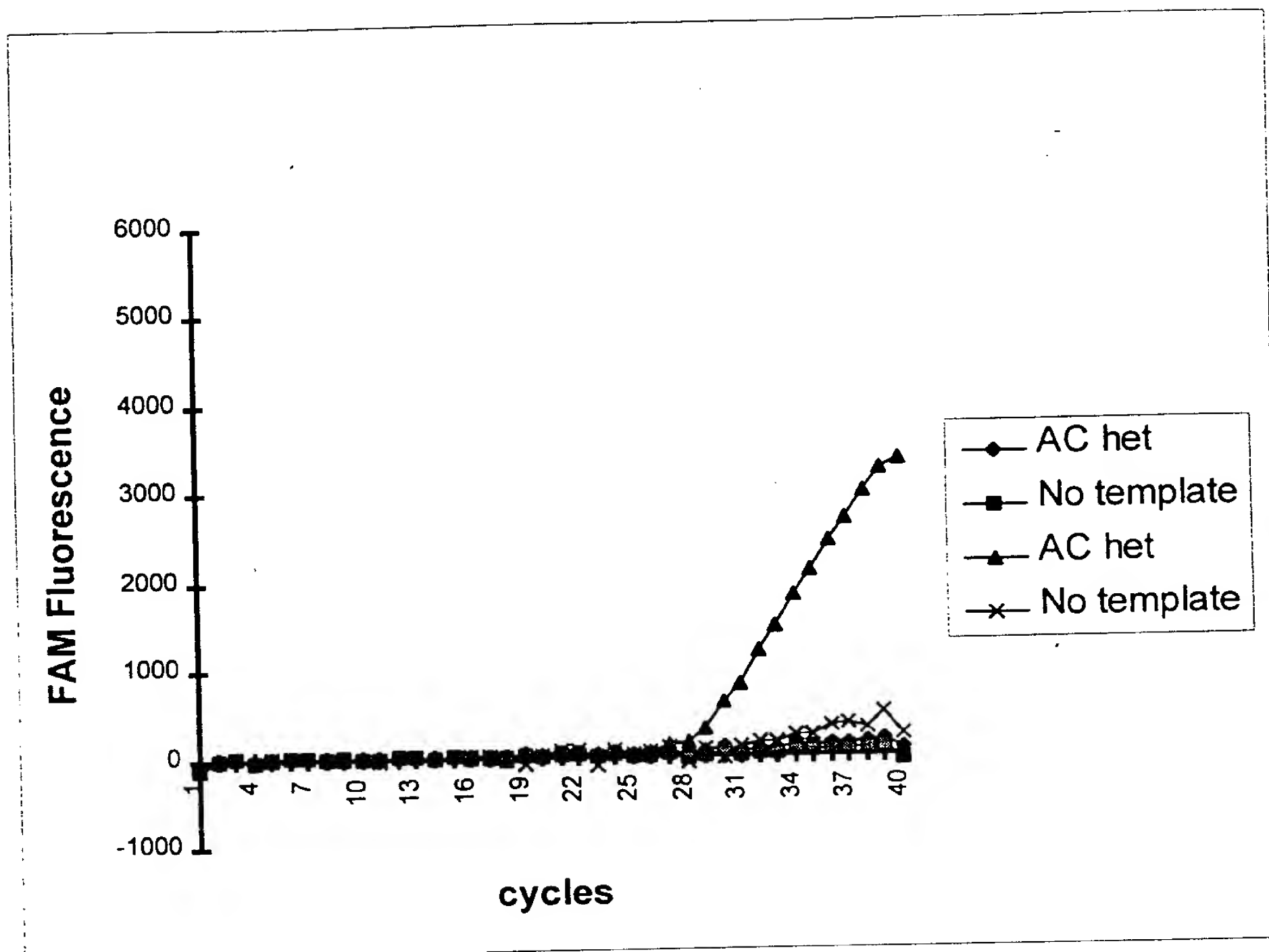
TOTAL 04/04/2000

32/42

FIGURE 17a

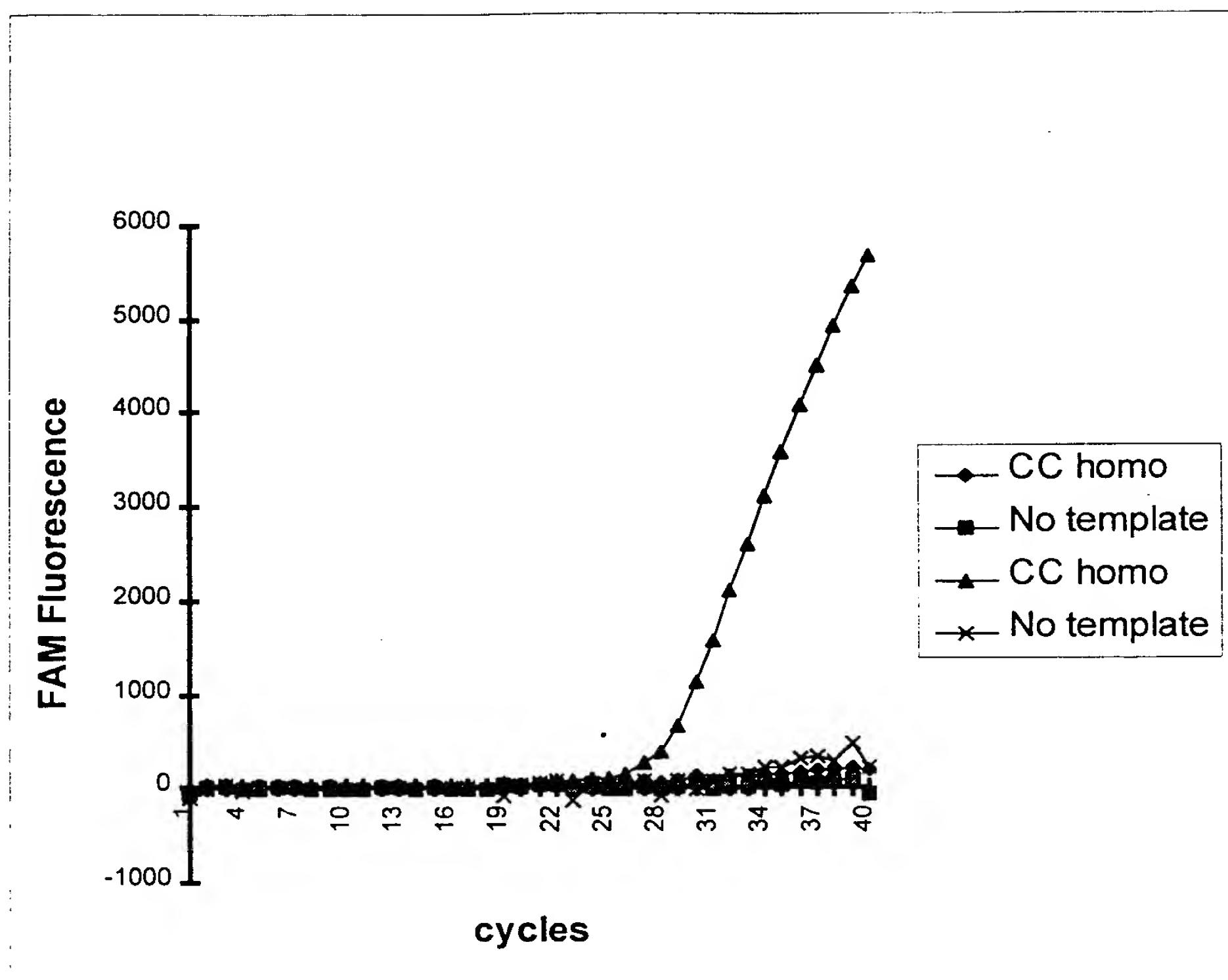
T02T0T' 0/24/2000

33/42

FIGURE 17b

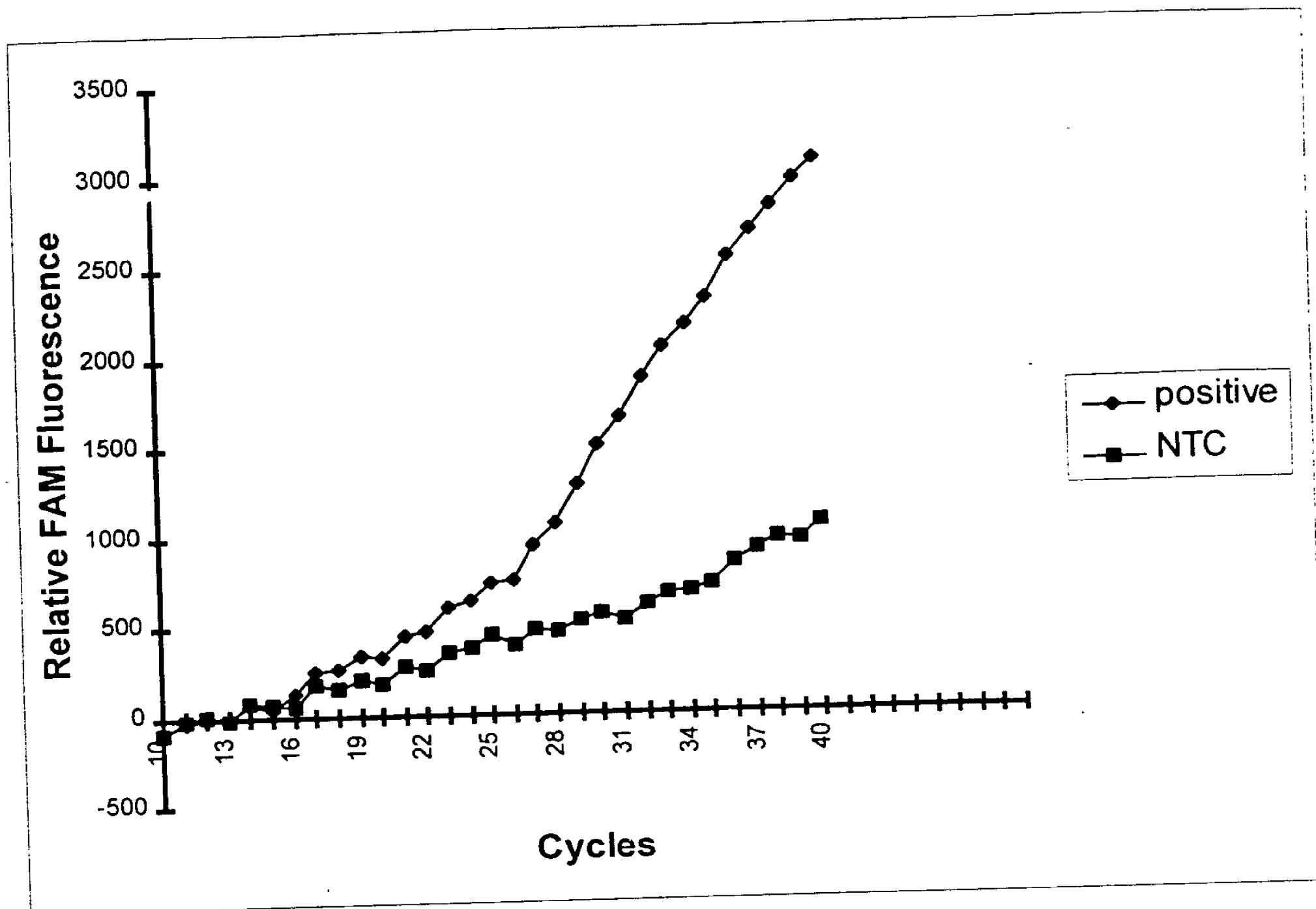
T02T01"0/31/650

34/42

FIGURE 17c

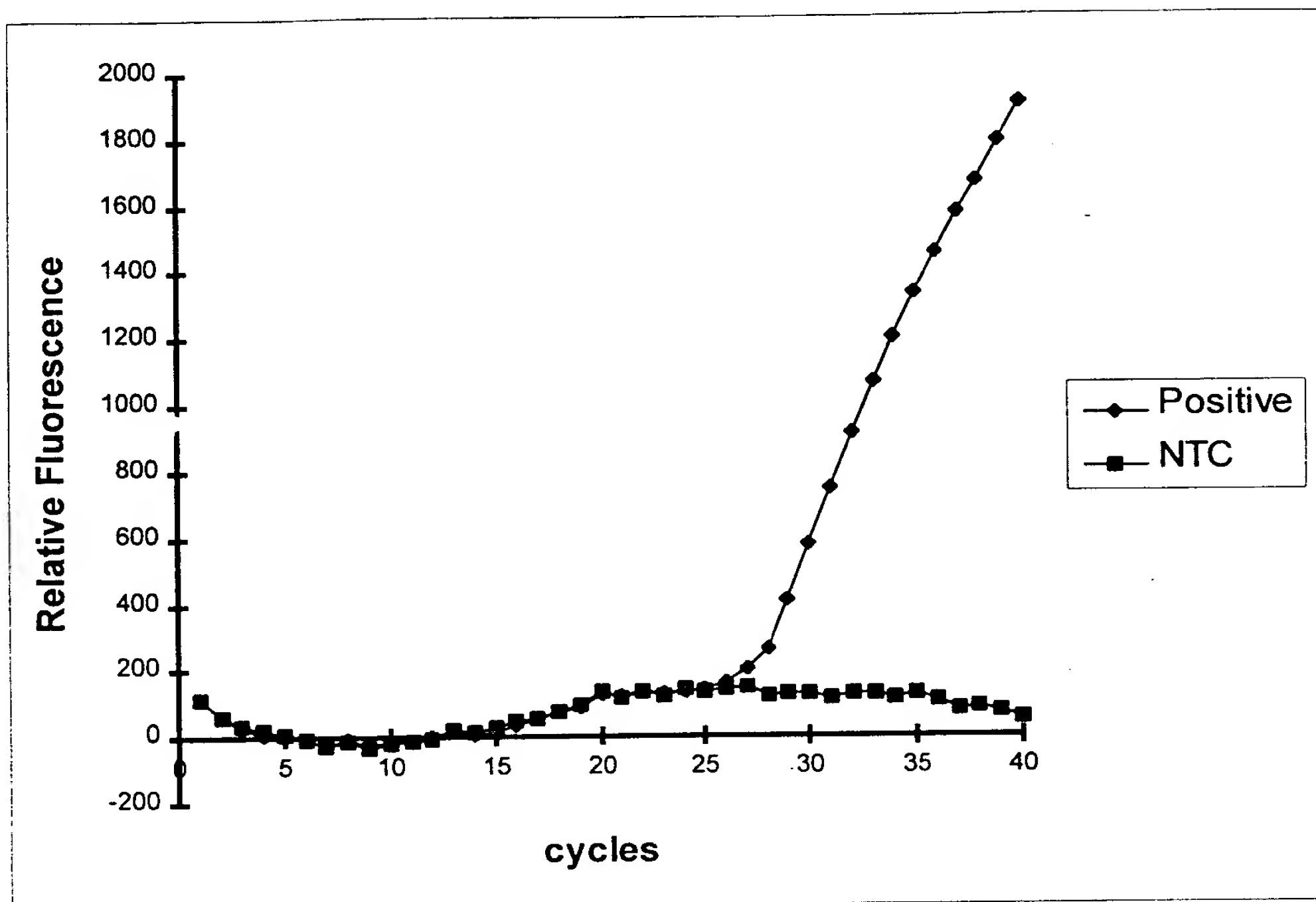
TOTAL 0342660

35/42

FIGURE 18

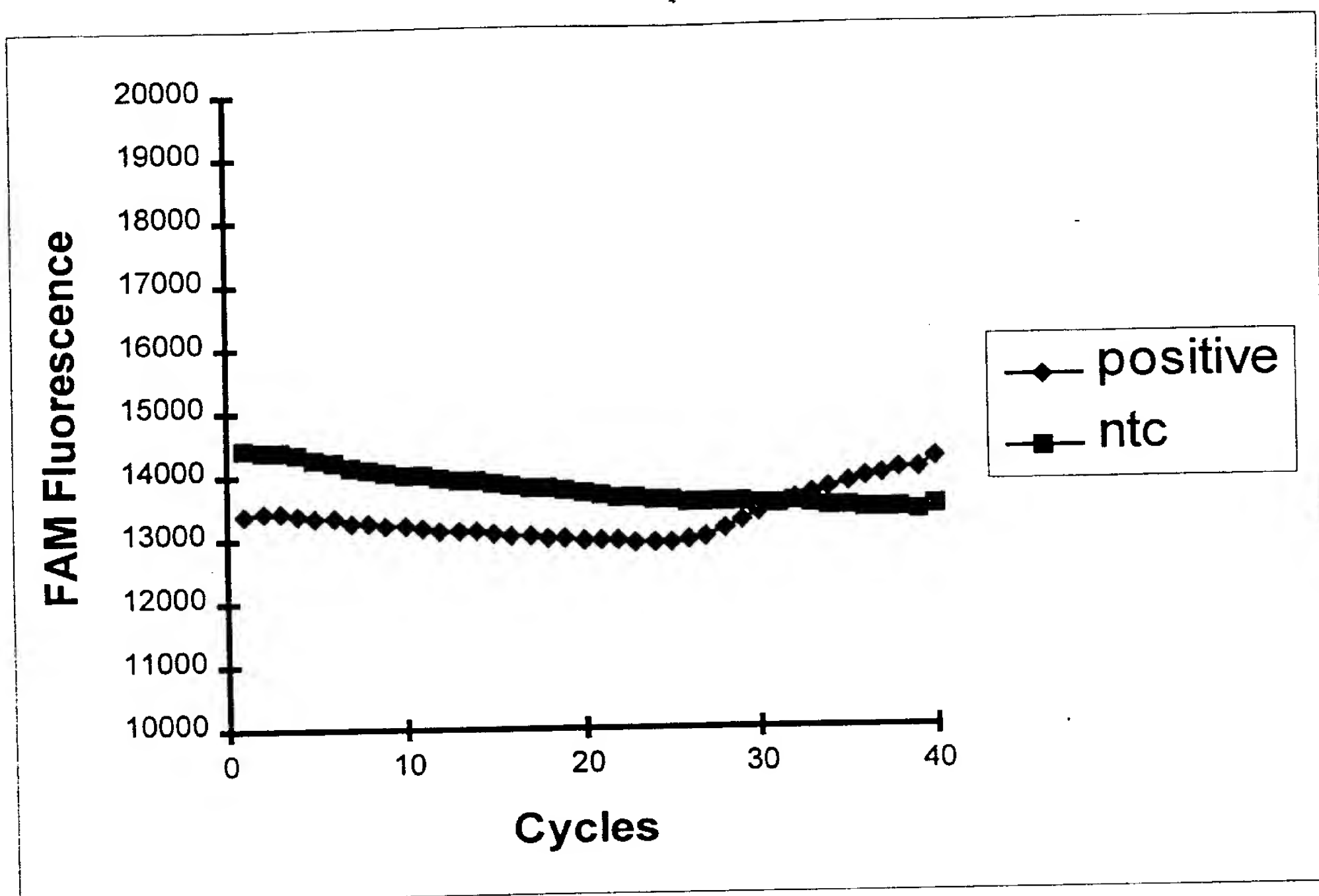
TOTAL 0424560

36/42

FIGURE 19

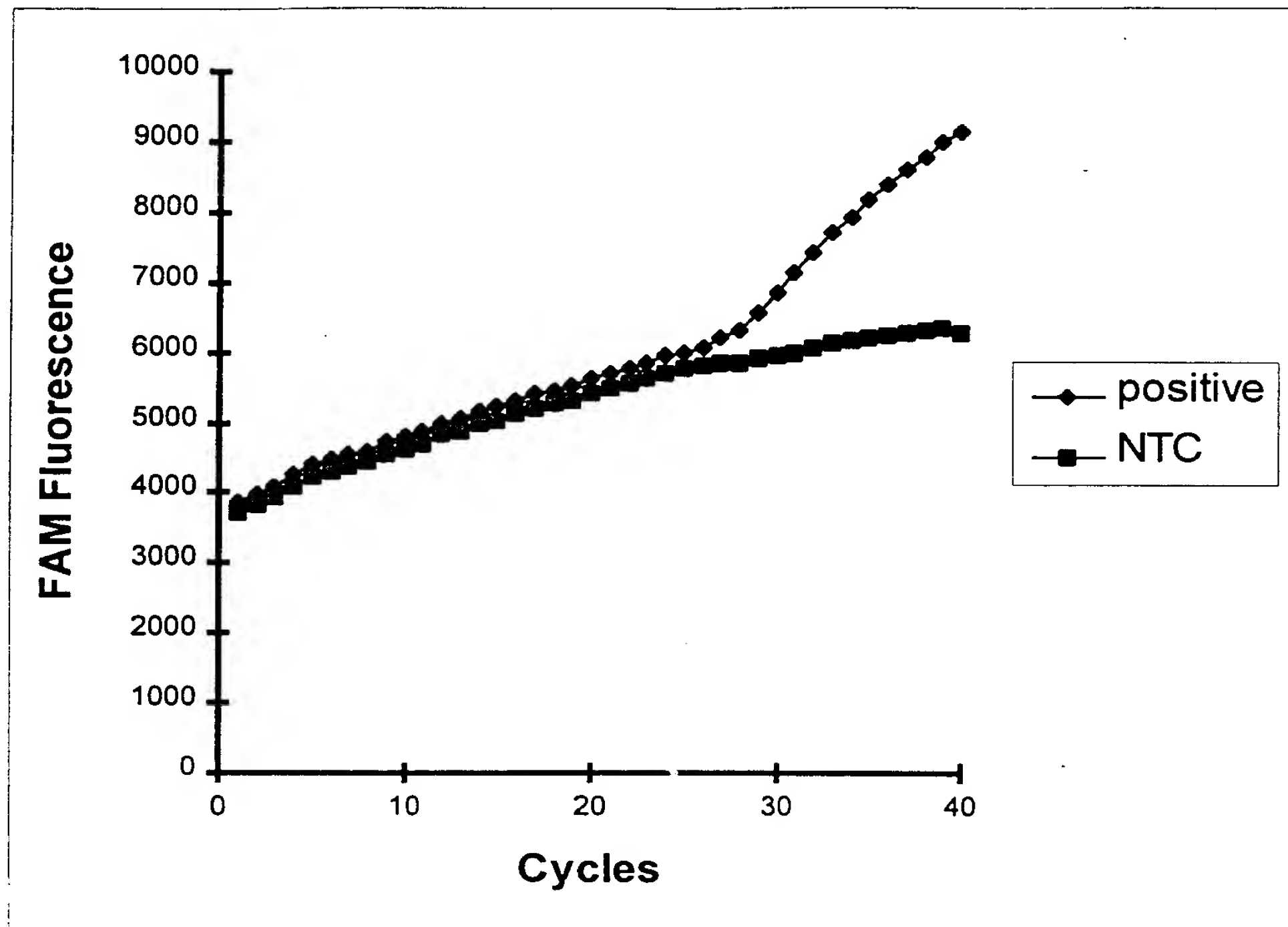
FOI b7E b7C b7D

37/42

FIGURE 20a

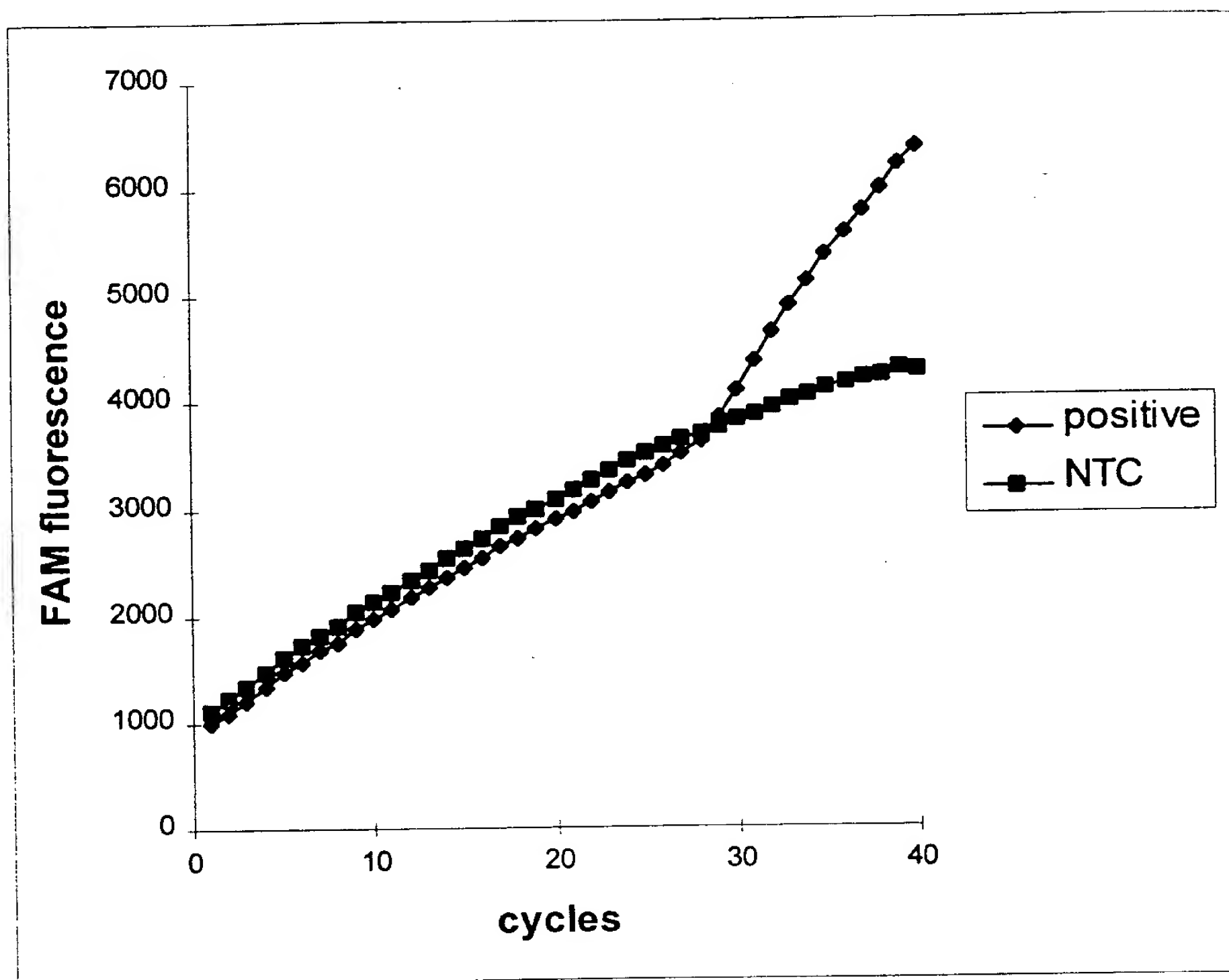
T02T0T" 02B4/65B

38/42

FIGURE 20b

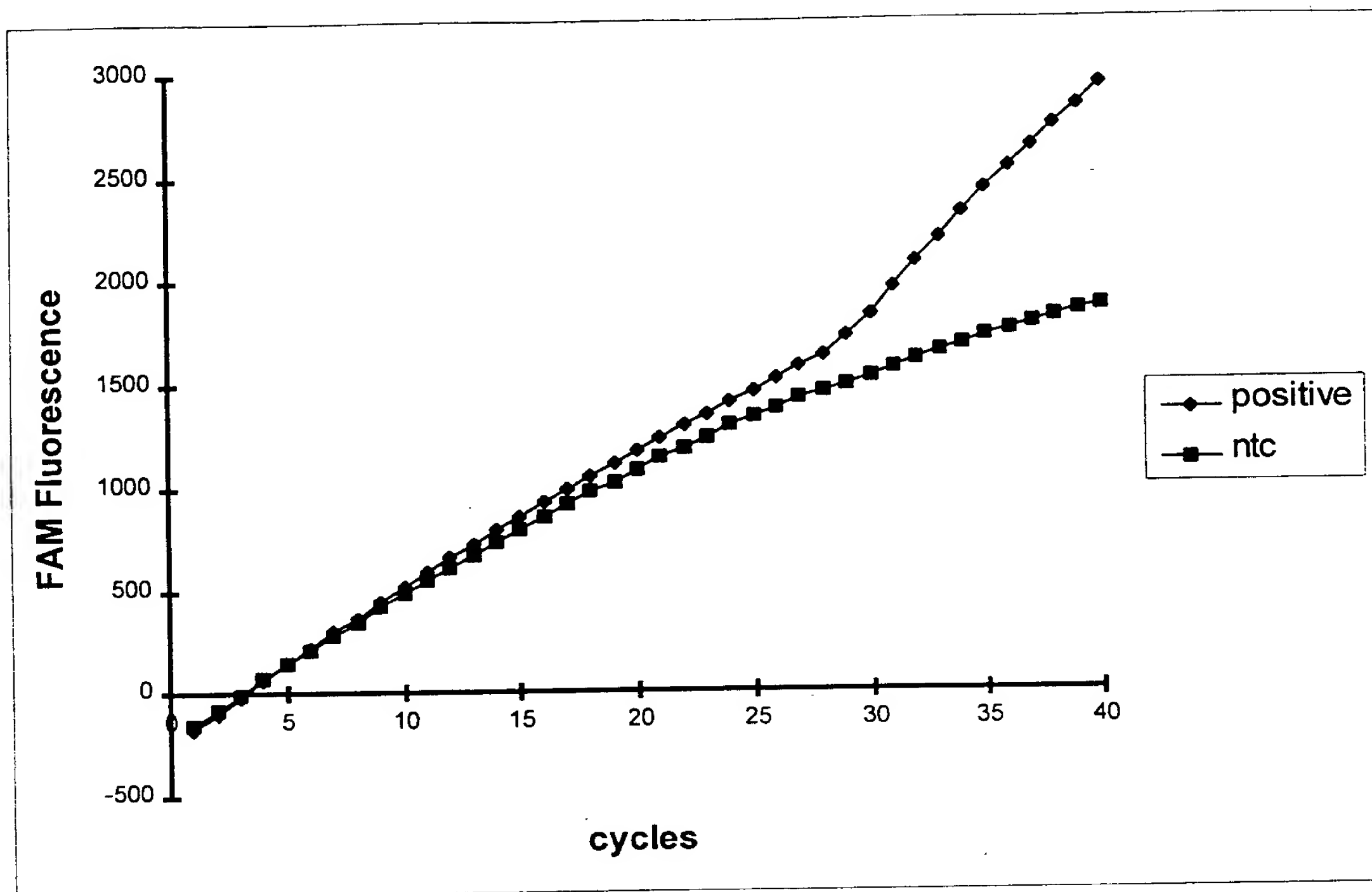
TOTAL 0284650

39/42

FIGURE 20c

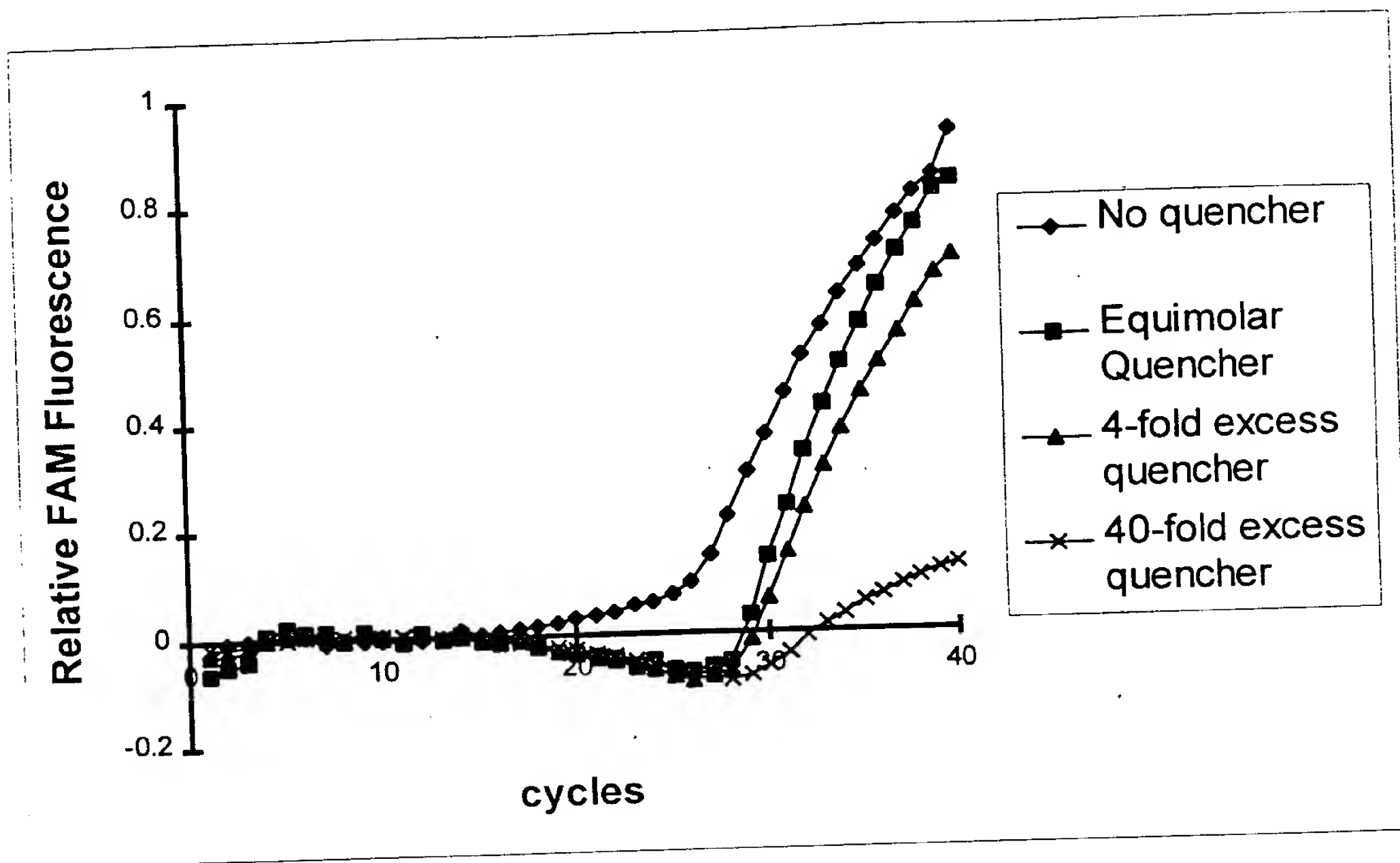
TOTAL 04/04/00

40/42

FIGURE 20d

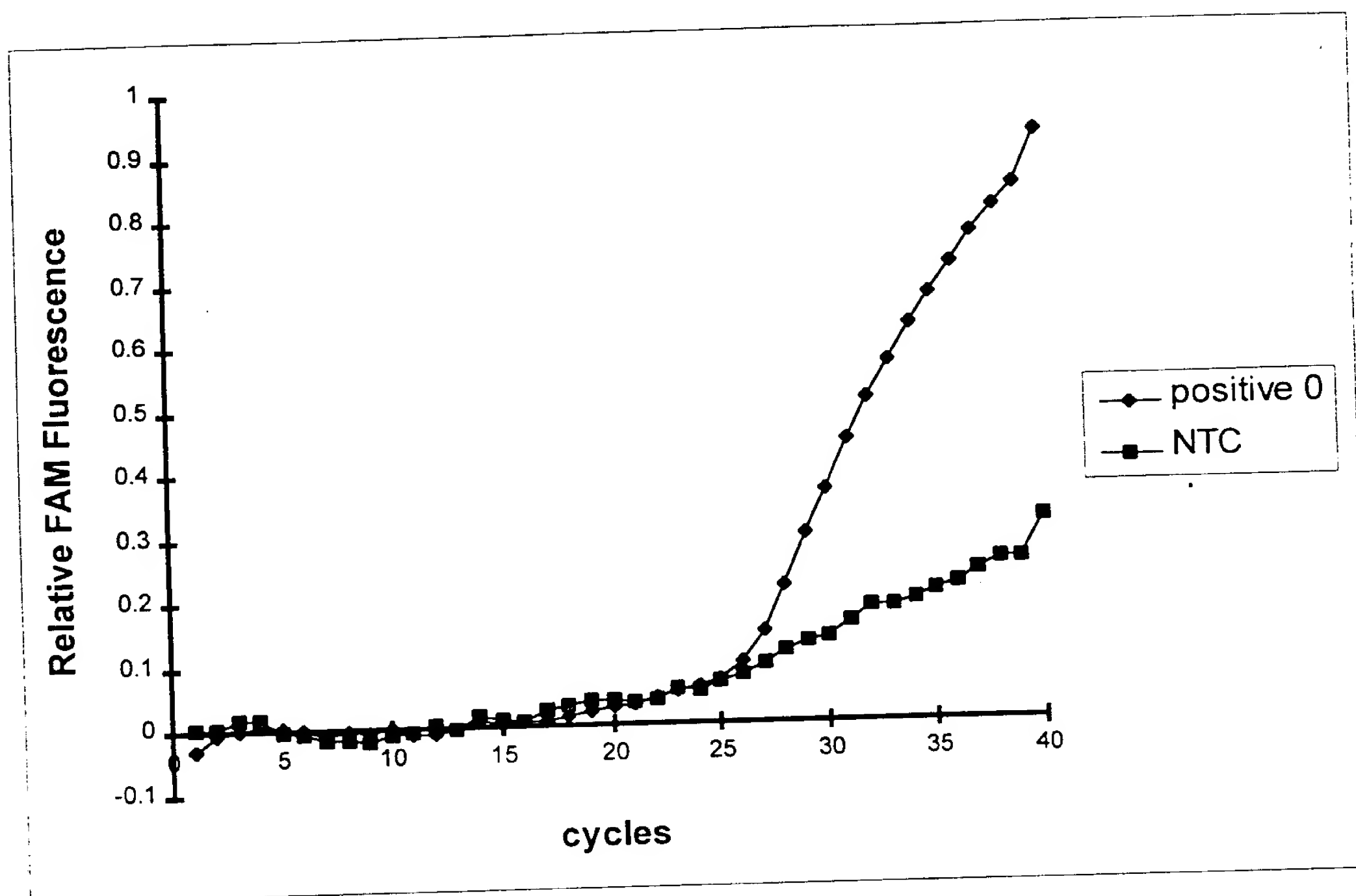
TDETD-0234266D

41/42

FIGURE 21a

FOOTNOTES

42/42

FIGURE 21b

FOOTNOTES 02342660